







# STATEWIDE HYDROGRAPHIC STAFF

Jack Byers, Deputy State Engineer

Thomas Ley, Chief Hydrographer

## **DENVER**

Jana Ash David Hutchens Patrick Tyler

# **GREELEY**

Robert Cooper M. L. Cunning Russell Stroud Steve Barrett Garver Brown Bob Erosky Mike Wild Devin Ridnour

## **PUEBLO**

Bill Tyner Mark Perry Lou Schultz Anthony Gutierrez Adam Adame

## **ALAMOSA**

Scott Veneman Stan Ditmars Lee Conner Matt Hardesty Jesse Jaminet

# **MONTROSE**

Jerry Thrush Steven Tuck Doug Wist

# **GLENWOOD SPRINGS**

James Kellogg Craig Bruner

## **STEAMBOAT SPRINGS**

Jean Ray

## **DURANGO**

Brian Boughton Cheston Hart Jason Morrow

## Table of Contents

### Division 1: Platte and Republican River Basins

06694650	
	SOUTH FORK SOUTH PLATTE RIVER BELOW ANTERO RESERVOIR
06694920	
	SOUTH PLATTE RIVER ABOVE SPINNEY MOUNTAIN RESERVOIR, CO
06695000	SOUTH PLATTE RIVER ABOVE ELEVENMILE CANYON RESERVOIR NEAR HARTSEL, CO
06699005	TARRYALL CREEK AT BORDEN DITCH NEAR JEFFERSON, CO
0000000	TARKTHEE CREEK AT BONDEN DITCH NEW OUT ERROW, CO.
	TARRYALL CREEK BELOW TARRYALL RESERVOIR, CO
06701500	SOUTH PLATTE RIVER BELOW CHEESMAN LAKE, CO
06706000	NORTH FORK SOUTH PLATTE RIVER BELOW GENEVA CREEK AT GRANT, CO
06707500	SOUTH PLATTE RIVER AT SOUTH PLATTE, CO
06707501	SOUTH PLATTE RIVER BELOW STRONTIA SPRINGS RESERVOIR, CO
06708000	SOUTH PLATTE RIVER AT WATERTON, CO
06709610	SOUTH PLATTE RIVER BELOW CHATFIELD RESERVOIR, CO
06710500	BEAR CREEK AT MORRISON, CO
06711500	BEAR CREEK AT MOUTH, AT SHERIDAN, CO
06714000	SOUTH PLATTE RIVER AT DENVER, CO
00714000	SOUTH FLATTE RIVER AT DENVER, CO
	FALL RIVER AT THE MOUTH NEAR IDAHO SPRINGS, CO
06720000	CLEAR CREEK AT DERBY, CO
	SOUTH PLATTE RIVER AT HENDERSON, CO
06720300	SOUTH PLATTE RIVER AT HENDERSON, CO
	MIDDLE ST. VRAIN CREEK NR. PEACEFUL VALLEY, CO
	SOUTH ST. VRAIN CREEK NEAR WARD, CO
	LEFTHAND DIVERSION AT SO. ST. VRAIN CREEK NEAR WARD, CO
	ST. VRAIN CREEK AT LYONS, CO
06725500	MIDDLE BOULDER CREEK AT NEDERLAND, CO
	BOULDER CREEK NEAR ORODELL, CO
00727000	,
	BOULDER CREEK AT BOULDER, CO
06729450	SOUTH BOULDER CREEK BELOW GROSS RESERVOIR NEAR COAL CREEK, CO
	SOUTH BOULDER CREEK DIVERSION NEAR ELDORADO SPRINGS, CO
0.000.	
06729500	SOUTH BOULDER CREEK NEAR ELDORADO SPRINGS, CO
06730300	COAL CREEK NEAR PLAINVIEW, CO
	ST. VRAIN CREEK AT MOUTH, NEAR PLATTEVILLE, CO
06/31000	
	WIND RIVER ABOVE ADAMS TUNNEL NEAR ESTES PARK, CO
	WIND RIVER BELOW ADAMS TUNNEL NEAR ESTES PARK, CO
06733000	BIG THOMPSON RIVER (ABOVE LAKE ESTES) AT ESTES PARK, CO
	FISH CREEK NEAR ESTES PARK, CO
06735500	BIG THOMPSON RIVER (BELOW LAKE ESTES) NEAR ESTES PARK, CO
	OLYMPUS TUNNEL (ESTES FOOTHILLS CANAL) AT LAKE ESTES, CO
06736000	NORTH FORK BIG THOMPSON RIVER AT DRAKE, CO
	DILLE TUNNEL (EAST PORTAL) NEAR DRAKE, CO
06738000	BIG THOMPSON RIVER AT MOUTH OF CANYON, NEAR DRAKE, CO
06/36000	
	BUCKHORN CREEK NEAR MASONVILLE, CO
	CHARLES HANSEN FEEDER CANAL BELOW BIG THOMPSON SIPHON NEAR DRAKE, CO
06738100	CHARLES HANSEN FEEDER CANAL WASTEWAY TO BIG THOMPSON NEAR DRAKE, CO
06738100	CHARLES HANSEN FEEDER CANAL POWER PLANT TO BIG THOMPSON RIVER
06/38100	
06/38100	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06/38100	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980 06764000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980 06764000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980 06764000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO.  ST. VRAIN SUPPLY CANAL NEAR LYONS, CO.  LITTLE THOMPSON RIVER AT CANYON MOUTH NEAR BERTHOUD, CO.  BIG THOMPSON RIVER AT MOUTH NEAR LA SALLE, CO.  CACHE LA POUDRE RIVER AT MOUTH OF CANYON, NEAR FORT COLLINS, CO.  CACHE LA POUDRE RIVER NEAR GREELEY, CO.  CACHE LA POUDRE RIVER NEAR GREELEY, CO.  CACHE LA POUDRE RIVER AT GREELEY WASTEWATER PLANT NEAR GREELEY, CO.  SOUTH PLATTE RIVER NEAR KERSEY, CO.  SOUTH PLATTE RIVER NEAR WELDONA, CO.  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2.  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1.  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1.  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3).  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3).  TRANSMOUNTAIN DIVERSIONS INTO THE SOUTH PLATTE BASIN IN COLORADO.  AURORA HOMESTAKE PIPELINE ABOVE SPINNEY MOUNTAIN RESERVOIR.  EAST PORTAL HOOSIER PASS TUNNEL NEAR ALMA, CO.  BOREAS PASS DITCH AT BOREAS PASS, CO.
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980 06764000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980 06764000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980 06764000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980 06764000 09042000 09042000 09046000 09050590	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980 06764000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06758910 06763990 06763990 06763980 06764000 09042000 09046000 09050590	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980 06764000 09042000 09046000 09050590	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO. 87 ST. VRAIN SUPPLY CANAL NEAR LYONS, CO. 88 ST. VRAIN SUPPLY CANAL NEAR LYONS, CO. 88 ST. VRAIN SUPPLY CANAL NEAR LYONS, CO. 88 LITTLE THOMPSON RIVER AT CANYON MOUTH NEAR BERTHOUD, CO. 91 BIG THOMPSON RIVER AT MOUTH NEAR LA SALLE, CO. 93 CACHE LA POUDRE RIVER AT MOUTH OF CANYON, NEAR FORT COLLINS, CO. 95 CACHE LA POUDRE RIVER NEAR GREELEY, CO. 97 CACHE LA POUDRE RIVER AT GREELEY WASTEWATER PLANT NEAR GREELEY, CO. 95 SOUTH PLATTE RIVER NEAR WERSEY, CO. 101 SOUTH PLATTE RIVER NEAR WELDONA, CO. 105 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2 SOUTH PLATTE RIVER AT BALZAC, CO. SOUTH PLATTE
06744000 06752000 06752500 06752500 06758500 06758500 06759910 06763990 06763990 06763980 06764000 09046000 09046000 09050590	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO. 87 ST. VRAIN SUPPLY CANAL NEAR LYONS, CO. 85 ST. VRAIN SUPPLY CANAL NEAR LYONS, CO. 85 ST. VRAIN SUPPLY CANAL NEAR LYONS, CO. 85 LITTLE THOMPSON RIVER AT CANYON MOUTH NEAR BERTHOUD, CO. 95 BIG THOMPSON RIVER AT MOUTH NEAR LA SALLE, CO. 95 CACHE LA POUDRE RIVER AT MOUTH OF CANYON, NEAR FORT COLLINS, CO. 95 CACHE LA POUDRE RIVER AT MOUTH OF CANYON, NEAR FORT COLLINS, CO. 95 CACHE LA POUDRE RIVER AT GREELEY, CO. 97 SOUTH PLATTE RIVER AT GREELEY WASTEWATER PLANT NEAR GREELEY, CO. 103 SOUTH PLATTE RIVER NEAR WELDONA, CO. 103 SOUTH PLATTE RIVER NEAR WELDONA, CO. 103 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2. 105 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1. 105 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1. 105 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3). 111 STATELINE DITCH RETURN NEAR JULESBURG CO. 115 STATELINE DITCH RETURN NEAR JULESBURG CO. 115 TRANSMOUNTAIN DIVERSIONS INTO THE SOUTH PLATTE BASIN IN COLORADO. 117 AURORA HOMESTAKE PIPELINE ABOVE SPINNEY MOUNTAIN RESERVOIR. 115 EAST PORTAL HOOSIER PASS TUNNEL NEAR ALMA, CO. 123 GREEAS PASS DITCH AT BOREAS PASS, CO. 123 CHAROLD D. ROBERTS TUNNEL NEAR GRANT, CO. 125 STRAIGHT CREEK TUNNEL AT EAST PORTAL EISENHOWER TUNNEL. 127 A.P. GUMLICK TUNNEL (AKA JONES PASS TUNNEL) RELEASE TO CLEAR CREEK NEAR JONES PASS, CO. 131 EAST PORTAL MOFFAT TUNNEL NEAR RACHINSVILLE, CO. 133 EAST PORTAL MOFFAT TUNNEL NEAR ROLLINSVILLE, CO. 135
06744000 06752000 06752500 06754000 06758500 06759910 06763990 06763990 06763980 06764000 09042000 09046000 09050590	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO. 87 ST. VRAIN SUPPLY CANAL NEAR LYONS, CO. 89 LITTLE THOMPSON RIVER AT CANYON MOUTH NEAR BERTHOUD, CO. 99 BIG THOMPSON RIVER AT MOUTH NEAR LA SALLE, CO. 99 CACHE LA POUDRE RIVER AT MOUTH OF CANYON, NEAR FORT COLLINS, CO. 99 CACHE LA POUDRE RIVER NEAR GREELEY, CO. 97 CACHE LA POUDRE RIVER HEAR GREELEY, CO. 97 CACHE LA POUDRE RIVER AT GREELEY WASTEWATER PLANT NEAR GREELEY, CO. 97 CACHE LA POUDRE RIVER NEAR KERSEY, CO. 101 SOUTH PLATTE RIVER NEAR KERSEY, CO. 102 SOUTH PLATTE RIVER NEAR WELDONA, CO. 103 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2. 105 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2. 105 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3) 111 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3) 113 SOUTH PLATTE RIVER AT JULESBURG CO. CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3) 113 SOUTH PLATTE RIVER AT JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 STATELINE DITCH RETURN NEAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN NEAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN NEAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN NEAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN NEAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN REAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN REAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN REAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN REAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN REAR LESSEN FROM COLD FROM CHANNEL NO 9 113 SATATELINE DITCH RETURN RE
06744000 06752000 06752500 06752500 06758500 06758500 06759910 06763990 06763990 06763980 06764000 09046000 09046000 09050590	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO. 87 ST. VRAIN SUPPLY CANAL NEAR LYONS, CO. 89 LITTLE THOMPSON RIVER AT CANYON MOUTH NEAR BERTHOUD, CO. 99 BIG THOMPSON RIVER AT MOUTH NEAR LA SALLE, CO. 99 CACHE LA POUDRE RIVER AT MOUTH OF CANYON, NEAR FORT COLLINS, CO. 99 CACHE LA POUDRE RIVER NEAR GREELEY, CO. 97 CACHE LA POUDRE RIVER HEAR GREELEY, CO. 97 CACHE LA POUDRE RIVER AT GREELEY WASTEWATER PLANT NEAR GREELEY, CO. 97 CACHE LA POUDRE RIVER NEAR KERSEY, CO. 101 SOUTH PLATTE RIVER NEAR KERSEY, CO. 102 SOUTH PLATTE RIVER NEAR WELDONA, CO. 103 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2. 105 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2. 105 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3) 111 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3) 113 SOUTH PLATTE RIVER AT JULESBURG CO. CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3) 113 SOUTH PLATTE RIVER AT JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 STATELINE DITCH RETURN NEAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN NEAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN NEAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN NEAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN NEAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN REAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN REAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN REAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN REAR JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 8) 113 SATATELINE DITCH RETURN REAR LESSEN FROM COLD FROM CHANNEL NO 9 113 SATATELINE DITCH RETURN RE
06744000 06752000 06752500 06752500 06758500 06758910 06763990 06763990 06763980 06764000 09042000 09046000 09050590 09047300 09021500 09022500 09013000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06758910 06763990 06763990 06763980 06764000 09042000 09046000 09050590 09047300 09022500 09013000 09013000 09010000 06745500	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06752500 06758500 06758910 06763990 06763990 06763980 06764000 09042000 09046000 09050590 09047300 09021500 09022500 09013000	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06758910 06763990 06763990 06763980 06764000 09042000 09046000 09050590 09047300 09022500 09013000 09013000 09010000 06745500	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06758500 06759910 06763990 06763990 06763980 06764000 09042000 09046000 09050590 09047300 09021500 09022500 09013000 09010000 06745500 06746000 06746500	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO
06744000 06752000 06752500 06754000 06758500 06758500 06763990 06763990 06763980 06764000 09042000 09046000 09050590 09047300 0902500 09013000 09010000 09010000 06745500	BOULDER CREEK FEEDER CANAL NEAR LYONS, CO.  ST. VRAIN SUPPLY CANAL NEAR LA SALLE, CO.  ST. CACHE LA POUDRE RIVER AT MOUTH NEAR LA SALLE, CO.  ST. CACHE LA POUDRE RIVER AT MOUTH OF CANYON, NEAR FORT COLLINS, CO.  ST. CACHE LA POUDRE RIVER NEAR GREELEY, CO.  CACHE LA POUDRE RIVER AT GREELEY WASTEWATER PLANT NEAR GREELEY, CO.  SOUTH PLATTE RIVER NEAR KERSEY, CO.  SOUTH PLATTE RIVER NEAR WELDONA, CO.  SOUTH PLATTE RIVER NEAR WELDONA, CO.  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2.  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1.  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1.  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3).  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3).  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 5 (INCLUDES FLOW FROM CHANNEL NO 3).  SOUTH PLATTE RIVER AT JULESBURG CO. CHANNEL NO 5 (INCLUDES FLOW FROM CHANNEL NO 3).  SOUTH PLATTE RIVER AT JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 3).  SOUTH PLATTE RIVER AT JULESBURG CO. CHANNEL NO 6 (INCLUDES FLOW FROM CHANNEL NO 3).  STATELINE DITCH RETURN NEAR JULESBURG CO.  SOUTH PLATTE RIVER AT JULESBURG CO.  STANDALD DITCH RETURN NEAR JULESBURG CO.  STANDALD DITCH RETURN NEAR JULESBURG CO.  STRAINSMOUNTAIN DIVERSIONS INTO THE SOUTH PLATTE BASIN IN COLORADO.  STRAINSMOUNTAIN DIVERSIONS INTO THE SOUTH PLATTE BASIN IN COLORADO.  STRAINSMOUNTAIN DIVERSIONS INTO THE SOUTH PLATTE BASIN IN COLORADO.  STRAINSMOUNTAIN DIVERSIONS INTO THE SOUTH PLATTE BASIN IN COLORADO.  STRAINSMOUNTAIN DIVERSE TUNNEL NEAR GRANT, CO.  STRAIGHT CREEK TUNNEL AT EAST PORTAL EISENHOWER TUNNEL  A.P. GUMLICK TUNNEL (AKA JONES PASS, CO.  STRAIGHT CREEK TUNNEL (AKA JONES PASS, CO.  STRAIGHT CREEK TUNNEL (AKA JONES PASS, CO.  STRAINSMOUNTAIN DIVERSURGE TO CLEAR CREEK NEAR JONES PASS, CO.  STANDALD DITCH AT BERTHOUD PASS, CO.  ST

06750500	DEADMAN DITCH NEAR DEADMAN PARK, CO WILSON SUPPLY DITCH NEAR EATON RESERVOIR, CO PIONEER DITCH AT HEADGATE NEAR LAIRD, CO PIONEER DITCH AT COLORADO-NEBRASKA STATE LINE	153 155
Divisio	n 2: Arkansas River Basin	
07082500	LAKE FORK CREEK BELOW SUGAR LOAF DAM NEAR LEADVILLE, CO	159
07084500	LAKE CREEK ABOVE TWIN LAKES RESERVOIR, CO	161
	LAKE CREEK BELOW TWIN LAKES RESERVOIR, CO	
07086000 07086500	ARKANSAS RIVER AT GRANITE, CO	
07086500	CLEAR CREEK ABOVE CLEAR CREEK RESERVOIR, CO	
07089520	COTTONWOOD CREEK AT BUENA VISTA, CO.	
07091000	CHALK CREEK AT NATHROP, CO	173
07091500	ARKANSAS RIVER AT SALIDA, CO	
07093700	ARKANSAS RIVER NEAR WELLSVILLE, CO	
07095000 07096000	GRAPE CREEK NEAR WESTCLIFFE, CO	
07097000	ARKANSAS RIVER AT PORTLAND, CO	
07099400	ARKANSAS RIVER ABOVE PUEBLO, CO.	
07111000	HUERFANO RIVER AT MANZANARES CROSSING NEAR REDWING, CO	
	HUERFANO RIVER AT BADITO, CO	
07114000	CUCHARAS RIVER AT BOYD RANCH NEAR LA VETA, CO	
	OXFORD FARMERS DITCH NEAR NEPESTA, CO	
07117000	ARKANSAS RIVER AT NEPESTA ROAD BRIDGE NEAR NEPESTA, CO (RIVER ONLY)	
07117000	ARKANSAS RIVER AT NEPESTA ROAD BRIDGE NEAR NEPESTA, CO (COMBINED)	201
07119700	ARKANSAS RIVER BELOW CATLIN DAM, NEAR FOWLER, CO	
07119705	CATLIN CANAL NEAR FOWLER, CO	
07119700 07120500	ARKANSAS RIVER BELOW CATLIN DAM NEAR FOWLER, CO (COMBINED)	
07120300	CROOKED ARROYO NEAR SWINK, CO	209
07123000	ARKANSAS RIVER AT LA JUNTA, CO.	
07123675	HORSE CREEK AT HIGHWAY 194 NEAR LAS ANIMAS, CO	
	RATON CREEK ABOVE STARKVILLE, CO	
07124500	PURGATOIRE RIVER AT TRINIDAD, CO	
07126500 07126500	PURGATOIRE RIVER AT NINEMILE DAM NEAR HIGBEE, CO (RIVER ONLY)	
07126500	PURGATOIRE RIVER AT NINEMILE DAM NEAR HIGBEE, CO (COMBINED)	
0,120000	PURGATOIRE RIVER BELOW HIGHLAND DAM NEAR LAS ANIMAS, CO	
	HIGHLAND CANAL BELOW HIGHLAND DAM NEAR LAS ANIMAS, CO	
	PURGATOIRE RIVER BELOW HIGHLAND DAM NEAR LAS ANIMAS, CO (COMBINED)	
	MUDDY CREEK BELOW MUDDY CREEK DAM NEAR TOONERVILLE, CO	
09061500	COLUMBINE DITCH NEAR FREMONT PASS, CO	
09062000	EWING DITCH AT TENNESSEE PASS, CO.	
09062500	WURTZ DITCH NEAR TENNESSEE PASS, CO	
	WURTZ DITCH EXTENSION AT TENNESSEE PASS NEAR LEADVILLE, CO	
09063700	HOMESTAKE TUNNEL NEAR GOLD PARK, CO	
09077160	BOUSTEAD TUNNEL AT EAST PORTAL NEAR LEADVILLE, CO	
	TWIN LAKES TUNNEL AT EAST PORTAL NEAR TWIN LAKES, CO	
09115000	LARKSPUR DITCH NEAR MARSHALL PASS, CO	255
Divisio	n 3: Rio Grande River Basin	
08213500	RIO GRANDE AT THIRTYMILE BRIDGE, NEAR CREEDE, CO	
	NORTH CLEAR CREEK BELOW CONTINENTAL RESERVOIR, CO	
08217500 08218500	RIO GRANDE RIVER AT WAGONWHEEL GAP, CO	
08219500	SOUTH FORK RIO GRANDE AT SOUTH FORK, CO	
08220000	RIO GRANDE RIVER NEAR DEL NORTE, CO.	
08220500	PINOS CREEK NEAR DEL NORTE, CO	269
08221500	RIO GRANDE NEAR MONTE VISTA, CO	
0000000	RIO GRANDE AT RIO GRANDE-ALAMOSA COUNTY LINE, CO	
08223000	RIO GRANDE AT ALAMOSA, CO	
08224500	KERBER CREEK NEAR VILLA GROVE, CO	
	GARNER CREEK NEAR VILLA GROVE, CO	
	MAJOR CREEK NEAR VILLA GROVE, CO	283
	COTTON CREEK NEAR MINERAL HOT SPRINGS, CO	
	WILD CHERRY CREEK NEAR CRESTONE, CO	
	RITO ALTO CREEK NEAR CRESTONE, CO	
08227000	SAGUACHE CREEK NEAR SAGUACHE, CO	

08227500	NORTH CRESTONE CREEK NEAR CRESTONE, CO	
	WILLOW CREEK NEAR CRESTONE, CO	299
00000500	SPANISH CREEK NEAR CRESTONE, CO	
08229500	COTTONWOOD CREEK NEAR CRESTONE, CO	
	LITTLE SPRING CREEK AT MEDANO RANCH NEAR MOSCA, CO	
	BIG SPRING CREEK AT MEDANO RANCH NEAR MOSCA CO	
08230500 08231000	CARNERO CREEK NEAR LA GARITA, CO	
08235250	ALAMOSA RIVER ABOVE WIGHTMAN FORK NEAR JASPER, CO	
08235270	WIGHTMAN FORK BELOW CROPSY CREEK NEAR SUMMITVILLE, CO	
08235290	WIGHTMAN FORK AT MOUTH NEAR JASPER, CO	
08236000	ALAMOSA RIVER BELOW RANGER CREEK, CO	
08236500	ALAMOSA CREEK BELOW TERRACE RESERVOIR, CO	
08238000	LA JARA CREEK AT GALLEGOS RANCH NEAR CAPULIN, CO	327
	SOUTH CHANNEL NORTON DRAIN DITCH NEAR LA SAUSES, CO	
08240000	RIO GRANDE ABOVE MOUTH OF TRINCHERA CREEK NEAR LASAUSES, CO	
08240500	TRINCHERA CREEK ABOVE TURNERS RANCH, NEAR FORT GARLAND, CO	
08241000	TRINCHERA CREEK ABOVE MOUNTAIN HOME RESERVOIR, CO	
08241500 08242500	SANGRE DE CRISTO CREEK NEAR FORT GARLAND, CO	
08242500	TRINCHERA CREEK BELOW SMITH RESERVOIR, NEAR BLANCA, CO	343
08245000	CONEJOS RIVER BELOW PLATORO RESERVOIR, CO	345
08246500	CONEJOS RIVER NEAR MOGOTE, CO	
08247500 08248000	SAN ANTONIO RIVER AT ORTIZ, CO	
08248500	SAN ANTONIO RIVER AT MOUTH, NEAR MANASSA, CO	
08249000	CONEJOS RIVER NEAR LASAUSES, MAIN (NORTH) CHANNEL, CO	355
08249000 08249000	CONEJOS RIVER NEAR LASAUSES, SECONDARY (SOUTH) CHANNEL, CO	357
08250000	CULEBRA CREEK AT SAN LUIS, CO	
08251500	RIO GRANDE NEAR LOBATOS, CO	
09118200	TARBELL DITCH NEAR COCHETOPA PASS, CO	
09121000 09341000	TABOR DITCH AT SPRING CREEK PASS, CO	
09347000	DON LA FONT DITCH NO.1 AT PIEDRA PASS, CO	
09347000	DON LA FONT DITCH NO.2 AT PIEDRA PASS, CO	
09347000	DON LA FONT DITCH, COMBINED, AT PIEDRA PASS, CO	
09348000 09351500	WILLIAM'S CREEK-SQUAW PASS DITCH AT SQUAW PASS, CO	
09351500	WEMINUCHE PASS DITCH AT WEMINUCHE PASS, CO	
Divisio	n 4: Gunnison River Basin	
09131490	MUDDY CREEK ABOVE PAONIA RESERVOIR	383
09131500	MUDDY CREEK BELOW PAONIA RESERVOIR	
	ABC LATERAL NEAR MONTROSE, CO	
	UNCOMPAHGRE RIVER NEAR OLATHE, CO	
	REDLANDS CANAL NEAR GRAND JUNCTION, CO	393
	GUNNISON RIVER BELOW REDLANDS DIVERSION DAM NEAR GRAND JUNCTION, CO	397
Diii	n 5: Colorado River Basin	
DIVISIO	ii 5: Colorado River Basin	
	BLUE RIVER AT HIGHWAY 9 BRIDGE BELOW BRECKENRIDGE, CO	399
	SNAKE RIVER AT KEYSTONE SKI AREA, CO	401
	ROARING FORK RIVER BELOW MAROON CREEK NEAR ASPEN, CO	
09077200	ROARING FORK RIVER ABOVE FRYINGPAN RIVER NEAR BASALT, CO	
	IVANHOE CREEK NEAR NAST, CO	
	SOUTH FORK FRYINGPAN RIVER AT UPPER STATION NEAR NORRIE, CO	
	CHAPMAN GULCH NEAR NAST, CO	
	RORTH FORK FRYINGPAN RIVER NEAR NORRIE, CO	
09080100	FRYINGPAN RIVER AT MEREDITH, CO	419
09080300	ROCKY FORK CREEK NEAR MEREDITH, CO	
	CRYSTAL RIVER AT DOW FISH HATCERY NEAR CARBONDALE, CO	
		-20
Divisio	n 6: Yampa, North Platte and Green River Basins	
	YAMPA RIVER ABOVE LAKE CATAMOUNT, CO	127
	TREETER ALVER ADOVE HAME CATAFIOUNT, CO	74/

09238500 06616500 06617100 06617500 09249750	WALTON CREEK NEAR STEAMBOAT SPRINGS, CO. MICHIGAN RIVER NEAR MEADOW CREEK RESERVOIR. MICHIGAN RIVER NEAR WALDEN, CO. ILLINOIS RIVER NEAR RAND, CO. WILLIAMS FORK AT MOUTH NEAR HAMILTON, CO. POT CREEK AT UTAH-COLORADO STATELINE NEAR VERNAL, UT.	431 433 435 437
Divisio	n 7: San Juan and Dolores River Basins	
	DOLORES TUNNEL OUTLET NEAR DOLORES, CO	
	LONE PINE CANAL BELOW GREAT CUT DIKE NEAR DOLORES, CO	
	BLANCO DIVERSION NEAR PAGOSA SPRINGS, CO	
09343300	RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, CO.	
	RIO BLANCO AT MOUTH NEAR TRUJILLO, CO	
09344000	NAVAJO RIVER AT BANDED PEAK RANCH, NEAR CHROMO, CO	453
	OSO DIVERSION NEAR CHROMO, CO	
09344400	NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, CO	
	LITTLE OSO DIVERSION NEAR CHROMO, CO	
09345200	LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM NEAR CHROMO, CO	
09362750	FLORIDA RIVER ABOVE LEMON RESERVOIR NEAR DURANGO, CO	
09357500	ANIMAS RIVER AT HOWARDSVILLE, CO	
09337300	LA PLATA AND CHERRY CREEK DITCH NEAR HESPERUS, CO	
	PINE RIDGE DITCH NEAR HESPERUS, CO.	
09365500	LA PLATA RIVER AT HESPERUS, CO.	
	CHERRY CREEK AT THE MOUTH NEAR RED MESA, CO	475
	LONG HOLLOW AT THE MOUTH NEAR RED MESA, CO	477
	PIONEER DITCH AT THE COLORADO-NEW MEXICO STATELINE	
	ENTERPRISE DITCH AT THE COLORADO-NEW MEXICO STATELINE	
09366500	LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE	
09370000	MANCOS RIVER NEAR MANCOS, CO	485
Index		487
Station Ide	entification Codes	492

#### 06694650 SOUTH FORK SOUTH PLATTE RIVER BELOW ANTERO RESERVOIR

LOCATION.--Lat 38°59'37", long 105°53'40", Park County, Hydrologic Unit 10190001, on left bank about 400 ft below Antero Reservoir.

DRAINAGE AREA AND PERIOD OF RECORD. -- 185 sq. mi.; 1976 to current year.

GAGE.--Concrete shelter and well with satellite monitoring (DCP and shaft encoder) and a continuous chart recorder at a sharp-crested Cipolletti weir with broad-crested concrete overflow walls. Primary reference gage is an electric tape. Gage is owned and maintained by the Denver Water Dept.

REMARKS.--Primary record at the gage is hourly data taken from satellite readings, with chart record backup. Chart data agree with the satellite data within ±0.02 ft., and were used on several days to fill in for missing satellite data, without loss of accuracy. The record is complete and reliable. Record is rated good. Station operated by Denver Water and record developed by Mike Wild.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

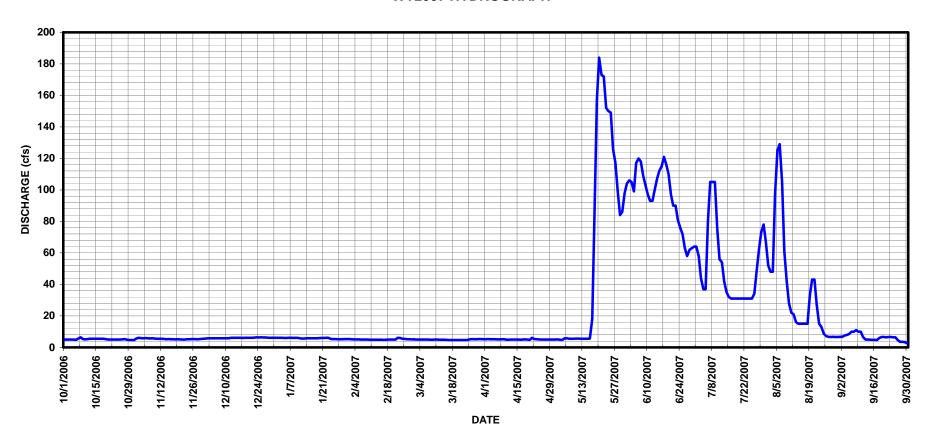
RATING TABLE.--MOD10FTCIP USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCII	ANGE, IN C	ME	EAN VALUE		10 SEFTE	MDER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.6	5.6	6.1	5.3	5.1	5.2	5.0	104	64	52	6.7
2	5.0	6.1	5.8	6.1	5.2	5.0	5.3	5.1	106	58	48	6.7
3	5.0	5.9	5.8	6.1	5.1	5.0	5.2	4.9	105	44	48	7.5
4	5.0	5.8	5.8		5.1	5.0	5.2	4.7	99	37	97	7.9
5	5.0	5.9	5.8		5.1	5.0	5.2	5.7	117	37	125	8.5
6	4.8	5.8	5.8		5.0	5.0	5.1	5.8	120	81	129	10
7	5.6	5.7	5.8		5.0	5.0	5.1	5.5	118	105	105	10
8	6.4	5.8	5.8		5.0	4.9	5.2	5.5	109	105	61	11
9	5.3	5.6	5.8		5.0	4.9	5.2	5.5	103	105	42	10
10	5.1	5.5	5.8		4.9	5.0	4.9	5.6	97	75	28	10
11	5.3	5.5	5.8		4.9	5.0	4.9	5.6	93	56	22	6.6
12	5.5	5.5	6.1		4.9	4.9	5.0	5.5	93	54	21	5.0
13	5.5	5.4	6.1		4.9	4.9	5.0	5.5	100	42	16	5.0
14	5.5	5.2	6.1		4.9	4.9	5.0	5.5	107	35	15	4.9
15	5.5	5.3	6.1		4.9	4.8	5.0	5.5	112	32	15	4.8
16	5.5	5.2	6.1		4.8	4.7	4.9	5.6	115	31	15	4.8
17	5.5	5.2	6.0		4.9	4.7	5.0	18	121	31	15	4.7
18	5.5	5.1	6.1		5.0	4.7	5.1	84	116	31	15	6.0
19	5.2	5.2	6.1		5.0	4.7	5.0	157	110	31	33	6.6
20	5.0	5.1	6.1		5.0	4.7	4.8	184	97	31	43	6.6
21	5.0	5.0	6.1		5.0	4.7	6.1	173	90	31	43	6.4
22	5.0	5.0	6.2		6.1	4.7	5.3	172	90	31	27	6.6
23	5.0	5.2	6.4		6.0	4.7	5.2	152	81	31	15	6.6
24	5.0	5.2	6.3		5.5	4.7	5.1	150	76	31	13	6.4
25	5.0	5.3	6.4		5.4	5.1	5.0	149	72	31	8.7	6.4
26	5.1	5.3	6.3		5.2	5.3	5.0	126	63	34	7.2	4.6
27	5.3	5.2	6.3		5.2	5.2	5.0	117	58	48	6.7	3.6
28	4.9	5.2	6.1		5.1	5.2	5.0	100	62	62	6.6	3.6
29	4.7	5.4	6.1			5.3	5.0	84	63	73	6.7	3.4
30	4.7	5.5	6.1			5.3	5.0	86	64	78	6.6	2.6
31	4.6		6.1	5.3		5.2		98		67	6.6	
TOTAL	160.5	162.7	186.8	178.9	143.4	153.3	153.0	1936.5	2861	1602	1092.1	193.5
MEAN	5.18	5.42	6.03		5.12	4.95	5.10	62.5	95.4	51.7	35.2	6.45
AC-FT	318	323	371	355	284	304	303	3840	5670	3180	2170	384
MAX	6.4	6.1	6.4		6.1	5.3	6.1	184	121	105	129	11
MIN	4.6	5.0	5.6	5.2	4.8	4.7	4.8	4.7	58	31	6.6	2.6
CAL YR	2006	TOTAL	1671.7	MEAN	4.58 MAX	6.	4 MIN	3.5	AC-FT	3316		
WTR YR		TOTAL	8823.7		24.2 MAX		34 MIN		AC-FT	17500		

MAX DISCH: 212 CFS AT 11:15 ON May. 28, 2007 GH 3.24 FT. GH CORR. 0.04 FT. SHIFT 0 FT. MAX GH: 3.28 FT. (GH CORR. 0.04 FT. APPLIED) AT 11:15 ON May. 28, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06694650 SOUTH FORK SOUTH PLATTE RIVER BELOW ANTERO RESERVOIR CO WY2007 HYDROGRAPH



#### 06694920 SOUTH PLATTE RIVER ABOVE SPINNEY MOUNTAIN RESERVOIR, CO

LOCATION.--Lat 38°59'10", long 105°40'52" in NE1/4 Sec 21, T. 12S, R. 74W, Park County, 3.3 miles below the confluence of the Middle and South Forks of the South Platte River, and 7 miles southeast of Hartsel, CO.

DRAINAGE AREA AND PERIOD OF RECORD. -- 772 sq. mi.; 1983 to current year.

GAGE. -- Graphic water-stage recorder and satellite monitoring (Sutron Satlink 2 DCP and shaft encoder) at a 25-foot concrete Parshall Flume with a wooden shelter and concrete well with inside electric tape gage and in-flume staff gage. Gage is operated and equipment is maintained by the city of Aurora.

REMARKS.--Record is taken from hourly satellite readings and is complete and reliable, except for November 14, 2006 to March 27, 2007, when the DCP was shut down for the winter. Gage height was affected by ice during the period November 2-13, 2006. Satellite daily gage heights agree with chart data to within  $\pm 0.01$  ft. Encoder calibration was checked with 29 visits while the gage was open. The record is good, except for November 2-15, 2006, which is fair due to ice effect, and November 14, 2006 to March 27, 2007, which is estimated and poor. Station operated and record developed by Mike Wild.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

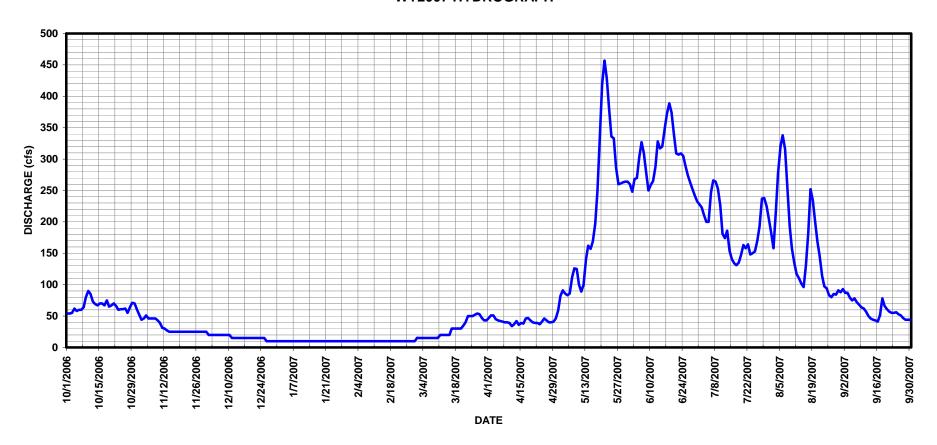
RATING TABLE. -- STD25FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

			210011		ME	AN VALUES	211 2000	10 02112	110211 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	52	20	10	10	15	47	59	260	228	182	93
2	54	44	20	10	10	15	51	82	248	223	158	87
3	55	46	20	10	10	15	51	91	268	211	215	87
4	62	51	20	10	10	15	45	86	270	200	277	79
5	58	46	20	10	10	15	43	83	302	200	319	75
6	60	46	20	10	10	15	42	86	327	247	338	78
7	60	46	20		10	15	41	112	310	266	316	72
8	64	46	20		10	15	40	126	278	264	256	68
9	80	43	20		10	15	40	125	250	253	193	64
10	90	39	20		10	15	39	100	259	226	157	62
11	85	31	15		10	20	34	89	265	181	134	57
12	73	30	15		10	20	37	100	288	174	117	50
13	69	27	15		10	20	42	140	328	186	110	46
14	67	25	15		10	20	36	162	317	154	102	44
15	70	25	15		10	20	39	157	320	141	96	43
16	70	25	15		10	30	38	169	348	134	130	41
17	67	25	15		10	30	46	197	372	131	183	51
18	75	25	15		10	30	47	250	389	135	252	78
19	65	25	15		10	30	43	337	374	147	234	66
20	67	25	15		10	30	40	419	339	163	201	61
21	70	25	15		10	35	39	457	309	158	168	57
22	66	25	15		10	40	39	429	307	164	145	55
23	60	25	15		10	50	37	379	309	148	114	55
24	61	25	15		10	50	41	336	305	150	97	56
25	61	25	15		10	50	46	333	289	153	94	53
26	62	25	10		10	52	43	287	274	170	83	51
27	55	25	10		10	54	40	260	263	193	80	47
28	64	25	10		10	53	40	261	252	237	85	44
29	71	25	10			47	41	263	242	238	84	44
30	70	25	10			43	46	264	233	225	91	44
31	61		10	10		43		264		205	88	
TOTAL	2046	972	485	310	280	917	1253	6503	8895	5905	5099	1808
MEAN	66.0	32.4	15.6	10.0	10.0	29.6	41.8	210	297	190	164	60.3
AC-FT	4060	1930	962	615	555	1820	2490	12900	17640	11710	10110	3590
MAX	90	52	20	10	10	54	51	457	389	266	338	93
MIN	54	25	10	10	10	15	34	59	233	131	80	41
CAL YR	2006	TOTAL	24637	MEAN	67.5 MAX	339	MIN	5	AC-FT	48870		
WTR YR		TOTAL	34473		94.4 MAX	457			AC-FT	68380		
	_00.	-01112	011.0			107		-0		30000		

MAX DISCH: 472 CFS AT 12:15 ON May. 21, 2007 GH 2.7 FT. SHIFT 0.03 FT. MAX GH: 2.7 FT. AT 12:15 ON May. 21, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06694920 SOUTH PLATTE RIVER ABOVE SPINNEY MOUNTAIN RESERVOIR CO WY2007 HYDROGRAPH



06695000 SOUTH PLATTE RIVER ABOVE ELEVENMILE CANYON RESERVOIR NEAR HARTSEL, CO

LOCATION.--Lat 38°58'03", long 105°34'51", in NE4 sec. 32, T.12 S., R.73 W., Park County, Hydrologic Unit 10190001, on left bank 200 ft downstream from highway bridge, 2.5 mi upstream from water line of Elevenmile Canyon Reservoir, at elevation 8,561 ft. and 13 mi southeast of Hartsel.

DRAINAGE AREA AND PERIOD OF RECORD. -- 880 mi2; 1933 to present.

GAGE.--Water-stage recorder with satellite telemetry (DCP and shaft encoder) in a wooden shelter at a 25 ft. Parshall Flume. Datum of gage is 8,612.83 ft, (Denver Board of Water Commissioners Datum). Station is owned and maintained by the Denver Water Dept. Satellite instrumentation is owned and maintained by the State Engineer of Colorado.

REMARKS.--Primary record is hourly data taken from satellite readings, with chart back-up. Record is complete and reliable, except for November 12, December 17, 18, 2006, February 22, April 7, 9, 28, May 5, 6, 7, June 28, 29, July 18, 2007, when the DCP transmission was compromised. Good chart data were used to fill in the missing satellite data without loss of accuracy. Spinney Reservoir is 2 miles upstream. Spinney release keeps this gage open year round. Ice jams downstream caused backwater into the flume during the periods: November 30, December 1-5, 2006, January 1, 2, 16-19, 25-31, February 1-5, 15, 17, 18, March 1, to 4, 2007. The maximum gage height (GH) recorded occurred during the backwater period. This GH was not used as the yearly Max GH, since it did not occur during good record. The record is rated good, with the exception of the ice affected periods, which are estimated from adjacent good record and considered fair. Station operated and record developed by Mike Wild.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- STD25FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	88	89	135	141	70	60	40	37	76	223	238	179	
2	88	89	135	141	70	60	39	37	126	216	229	179	
3	89	89	135	141	70	60	39	37	127	211	207	179	
4	88	89	135	141	70	60	40	37	140	213	217	179	
5	88	89	135	141	70	61	39	37	186	200	264	170	
6	89	89	135	141	61	61	40	38	262	191	337	155	
7	90	89	135	140	52	61	40	38	308	217	385	151	
8	90	89	135	127	51	61	40	37	294	236	385	151	
9	90	89	135	92	51	61	48	37	253	220	360	145	
10	89	89	135	92	51	61	53	37	236	225	315	141	
11	89	89	135	92	51	61	53	37	236	209	256	135	
12	89	89	135	92	51	61	53	37	237	189	212	130	
13	89	89	135	92	51	62	46	37	246	175	195	125	
14	89	89	135	92	56	62	41	37	275	173	191	122	
15	89	89	135	92	60	62	41	38	300	173	180	121	
16	89	89	135	90	60	62	48	38	305	171	170	105	
17	89	89	135	90	60	62	49	38	337	133	194	93	
18	89	89	137	90	60	63	40	38	367	89	251	93	
19	89	89	137	90	59	63	38	38	364	107	273	93	
20	89	89	137	92	59	63	38	39	329	147	276	93	
21	89	89	136	91	59	74	37	39	300	160	276	94	
22	89	89	136	91	59	83	36	39	287	160	276	94	
23	89	90	137	91	59	78	37	39	287	160	247	94	
24	89	90	139	84 70	59	63	37	61	287	161	198	93	
25 26	89	89 89	139		59	61	37	78 77	286 276	156	189	92	
26 27	90	112	139 139	70 70	59 59	51 42	37 37	77	276	179 221	187 179	90 90	
28	89 89	137	140	70	59	42	37	76	249	273	179	90	
29	89	137	139	70		42	37	76	249	273	180	90	
30	89	135	139	70		41	37	63	229	257	179	90	
31	89	133	141	70		39		53		237	179		
31	09		141	70		39		33		230	1/9		
TOTAL	2759	2837	4230	3056	1655	1841	1234	1427	7710	5971	7404	3656	
MEAN	89.0	94.6	136	98.6	59.1	59.4	41.1	46.0	257	193	239	122	
AC-FT	5470	5630	8390	6060	3280	3650	2450	2830	15290	11840	14690	7250	
MAX	90	137	141	141	70	83	53	78	367	288	385	179	
MIN	88	89	135	70	51	39	36	37	76	89	170	90	
CAL YR	2006	TOTAL	40904 1	MEAN	112 MAX	296	6 MIN	35	AC-FT	81130			

MAX DISCH: 397 CFS AT 19:15 ON Jun. 18, 2007 GH 2.47 FT. SHIFT -0.02 FT. MAX GH: 2.47 FT. AT 19:15 ON Jun. 18, 2007

120 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

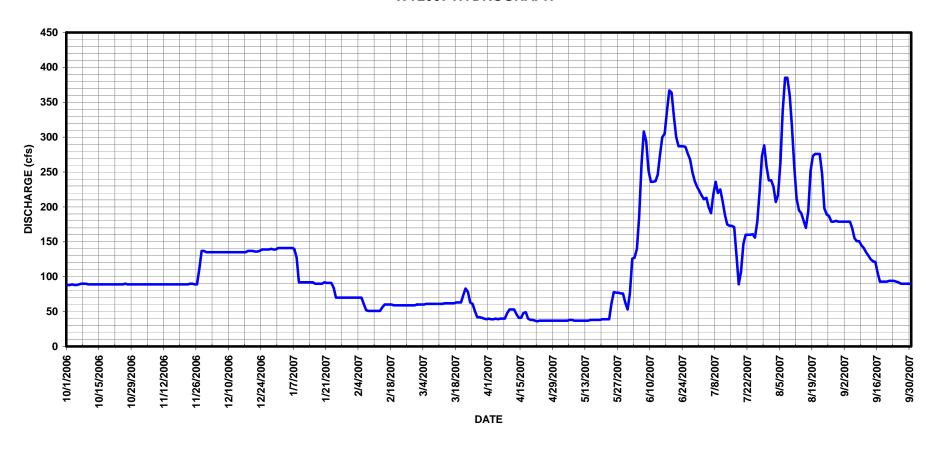
43780 MEAN

WTR YR 2007

TOTAL

385 MIN 36 AC-FT 86840

# 06695000 SOUTH PLATTE RIVER ABOVE ELEVENMILE CANYON RESERVOIR NEAR HARTSEL CO WY2007 HYDROGRAPH



#### 06696000 SOUTH PLATTE RIVER BELOW ELEVENMILE RESERVOIR NEAR LAKE GEORGE, CO

LOCATION.--Lat 38°54'19", long 105°28'22". in SW14 sec. 20, T.13 S., R.72 W., Park County, Hydrologic Unit 10190001, on left bank 700 ft downstream from Elevenmile Canyon Reservoir and 8.2 mi southwest of town of Lake George.

DRAINAGE AREA AND PERIOD OF RECORD. -- 963 mi<sup>2</sup>. October 1929 to current year. Monthly data only for some periods.

GAGE. -- Water-stage recorder and satellite monitoring (Sutron Satlink 2 DCP and shaft encoder) in a concrete shelter at a 15-ft. Parshall Flume with outside staff gage. Primary reference is an inside tape gage with supplemental outside staff gage in the flume. Elevation of gage is 8,458 ft from topographic map. supplemental outside staff gage in the flume. Elevation of gage is 8,458 ft from topographic map. Station is owned and maintained by the Denver Water Dept. A 10-foot rectangular bypass channel is located beside the upper right wingwall of the 15-foot Parshall. The channel is normally kept closed by boards. At a gage height of 3.26 in the Parshall, water reaches the floor of the bypass channel.

REMARKS.--Record is taken from hourly satellite data and is complete and reliable for the water year, except the period Nov. 2-17, 2006, when the flume was out of operation for maintenance. The record is good, except during the period of flume maintenance. This period of record was estimated using Denver Water Board operational records and with values obtained by interpolation of chart gage heights before and after the flume was taken out of service. The record for this period is estimated and considered poor. Station operated and record developed by Mike Wild.

RATING TABLE. -- STD15FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

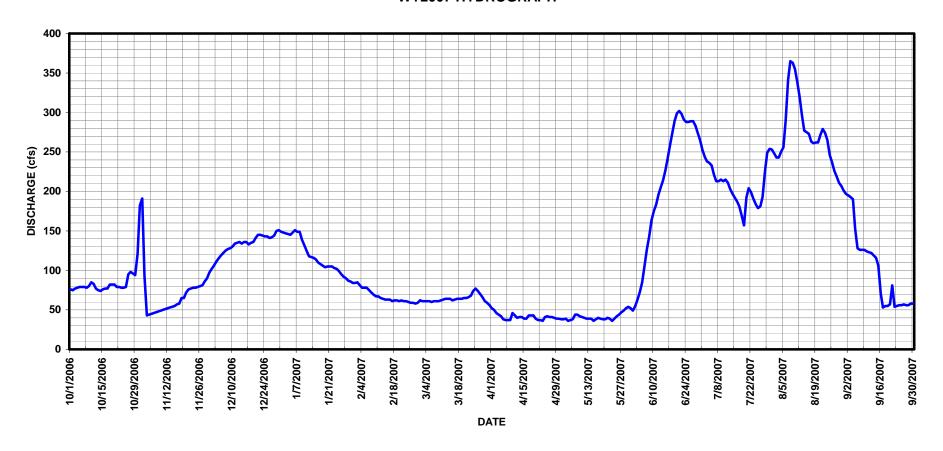
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	191	102	148	84	62	52	38	49	253	248	197
2	75	93	106	147	85	61	50	38	55	244	243	195
3	77	43	111	146	81	61	46	39	63	238	243	193
4	78	44	115	145	78	61	44	36	73	236	250	190
5	79	45	119	148	78	61	42	37	85	233	256	153
6	79	46	122	151	78	60	38	38	106	221	290	128
7	79	47	125	149	75	61	37	44	126	213	341	126
8	78	48	127	149	72	61	37	44	143	213	365	126
9	80	49	128	139	69	61	37	42	163	215	363	126
10	85	50	130	132	67	62	46	41	175	213	355	124
11	83	51	134	125	67	63	43	40	183	215	338	123
12	77	52	135	118	65	64	40	39	196	211	320	122
13	75	53	136	117	64	64	41	39	205	203	296	119
14	74	54	134	116	63	64	41	39	214	197	277	116
15	76	55	136	114	63	62	39	36	226	192	275	106
16	77	57	136	110	63	63	39	38	242	187	273	71
17	77	58	133	108	61	64	43	40	258	181	263	53
18	82	65	135	106	62	64	43	39	274	169	261	55
19	82	65	136	104	62	64	43	38	289	157	262	55
20	82	72	141	105	61	65	39	38	299	192	262	57
21	79	76	145	105	62	65	37	40	302	204	272	81
22	79	77	145	105	61	66	37	39	298	199	279	54
23	78	78	144	103	61	68	36	36	291	191	274	55
24	78	78	143	102	60	74	41	39	288	184	265	56
25	79	79	143	99	59	77	42	42	288	179	246	56
26	95	80	141	95	59	74	41	44	289	181	237	57
27	98	81	142	92	58	70	41	47	289	193	226	56
28	96	86	144	90	59	66	40	49	283	225	219	56
29	94	90	150	87		61	39	52	274	249	211	58
30	121	97	151	86		59	39	54	265	254	207	58
31	182		149	84		56		52		253	201	
TOTAL	2650	2060	4138	3625	1877	1984	1233	1277	6291	6495	8418	3022
MEAN	85.5	68.7	133	117	67.0	64.0	41.1	41.2	210	210	272	101
AC-FT	5260	4090	8210	7190	3720	3940	2450	2530	12480	12880	16700	5990
MAX	182	191	151	151	85	77	52	54	302	254	365	197
MIN	74	43	102	84	58	56	36	36	49	157	201	53
CAL YR	2006	TOTAL	37333	MEAN	102 MAX	219	MIN	33	AC-FT	74050		
WTR YR	2007	TOTAL	43070	MEAN	118 MAX	365			AC-FT	85430		

MAX DISCH: 776 CFS AT 12:10 ON Sep. 21, 2007 GH 5.07 FT. SHIFT 0.00 FT. MAX GH: 5.07 FT. AT 12:10 ON SEP. 21, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06696000 SOUTH PLATTE RIVER BELOW ELEVENMILE RESERVOIR NEAR LAKE GEORGE CO WY2007 HYDROGRAPH



#### 06699005 TARRYALL CREEK AT BORDEN DITCH NEAR JEFFERSON, CO

LOCATION.--Lat. 39°17'13", Long. 105°41'43", in the NW 4 of the NW 4 of Sec. 8, T. 9 S., R. 74 W., Park County, Hydrologic unit 10190001, on left bank 1800 ft. downstream from Rock Creek, 9 mi. southeast of Jefferson and 1.0 mi. northwest of Bordenville.

DRAINAGE AREA AND PERIOD OF RECORD.--230 mi². Apr. 26, 1983 (no previous gage at this site). Operation discontinued by USGS 9-30-97. Taken over by Colorado Division of Water Resources.

GAGE.--Shaft encoder and satellite monitoring DCP in a in a metal shelter on an 18-inch metal well. Well is connected to stream by one 2-in. intake. Primary gage is a drop tape to a shelf mounted RP. Altitude of gage is 9020 ft, from USGS topographic map. Station is maintained by the City of Aurora.

REMARKS.--Record is taken from hourly satellite readings and is complete and reliable, except for the following periods: November 8, 2006 partial (shut-down) day; November 8, 2006 to April 16, 2007, when the station was closed for winter; April 16, 2007 partial (start-up) day; and April 18, 2007, appeared to have ice in the stream. The record is good for the entire period of operation, except for periods of partial and ice affected record, which are estimated and considered poor. The station is operated on a seasonal basis. Station operated and record developed by Mike Wild.

RATING TABLE.--TARBORCO06 USED FROM 01-OCT-2006 TO 08-NOV-2006 TARBORCO06 USED FROM 06-APR-2007 TO 30-SEP-2007

#### DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

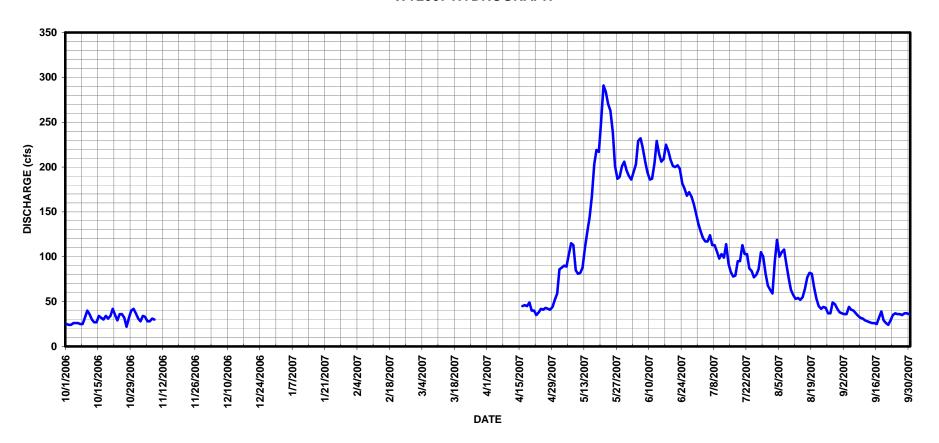
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	31						59	190	137	63	37
2	24	28						86	186	128	59	36
3	24	34						88	194	121	95	36
4	26	33						90	203	117	119	44
5	26	28						89	229	117	100	41
6	26	28						102	232	124	105	
7	25	31						115	221	113	108	37
8	25	30						113	206	113	92	34
9	32							85	194	106	76	
10	40							81	186	98	63	
11	36							82	187	103	57	
12	30							88	204	99	53	
13	27							110	229	114	54	
14	27							127	215	92	52	
15	34							144	206	83	55	
16	32						45	167	209	78	64	
17	30						46	203	225	79	77	
18	34						45	219	218	95	82	
19	31						49	217	208	95	81	
20	34						40	251	201	113	66	
21	42						40	291	200	103	53	
22	35						35	284	202	103	45	
23	29						38	270	198	87	42	
24	36						42	263	182	84	44	
25	36						41	239	176	77	43	36
26	32						43	201	168	80	37	36
27	22						42	187	172	86	37	
28	32						41	189	167	105	49	
29	40						44	201	159	100	47	
30	42						52	206	148	81	42	36
31	37							196		68	38	
TOTAL	971	243					643	5043	5915	3099	1998	997
MEAN	31.3	30.4					42.9	163	197	100	64.5	33.2
AC-FT	1930	482					1280	10000	11730	6150	3960	1980
MAX	42	34					52	291	232	137	119	
MIN	22	28					35	59	148	68	37	
		_0							0	00	0,	= =
CAL YR	2006	TOTAL	13546 MI	EAN	64.2 MAX	235	5 MIN	22	AC-FT	26870	(PARTIAL	YEAR RECORD)
WTR YR	2007	TOTAL		EAN	91.3 MAX	291		22	AC-FT			YEAR RECORD)
									~		,	

TOTAL 18909 MEAN 37510 (PARTIAL YEAR RECORD) MAX DISCH: 310 CFS AT 16:00 ON May. 21, 2007 GH 4.15 FT. SHIFT 0.01 FT.

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

MAX GH: 4.15 FT. AT 16:00 ON May. 21, 2007

### 06699005 TARRYALL CREEK AT BORDEN DITCH NEAR JEFFERSON CO WY2007 HYDROGRAPH



#### TARRYALL CREEK BELOW TARRYALL RESERVOIR, CO

LOCATION.--Lat. 39° 13′ 18″, Long. 105° 36′ 07″; in SW1/4 of sec 31, T. 9S, R. 73W, Park County, about 500 ft. downstream from Tarryall Reservoir.

DRAINAGE AREA AND PERIOD OF RECORD.--355 sq. mi., from DWR Dam Safety Section database. Age of the gage is not known, although the reservoir was built in 1929. DWR first ran levels in June of 1975, and installation in 1970's is consistent with the type of materials used. The gage has been operated infrequently and records have never been kept prior to 2005. The gage was activated with satellite monitoring in WY2005.

GAGE.--SatLink 2 satellite monitoring Data Collection Platform (DCP) with shaft encoder in a 36" CMP shelter and cast iron well, located on the right downstream abutment of a bridge on Park County Road 77. Gage is operated and equipment is maintained by the CO Div. of Water Resources under a cooperative agreement with the CO Div. of Wildlife, the owner of Tarryall Reservoir. There is an inside reference tape and a staff gage on the center abutment of the bridge. Elevation of gage is 8800 ft. from topographic map.

REMARKS.--Record is taken from hourly average satellite readings and is complete and reliable, except for December 5, 2006 to March 12, 2007, when the station was closed for the winter; December 4, 2006 and March 13, 2007 were partial record days; and May 4, 2007 to May 13, 2007, when the DCP failed. Encoder calibration was checked with 30 visits by DWR personnel while the gage was open. The record is good, except for the period of DCP failure, which is poor, and the days of December 4, 2006 and March 13, 2007, which are estimated and fair. The station is operated on a seasonal basis. Station operated and record developed by Mike Wild.

RATING TABLE.--TARTARCO02 USED FROM 01-OCT-2006 TO 03-DEC-2006 TARTARCO02 USED FROM 14-MAR-2007 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	36	14				32	47	198	151	72	49
2	25	32	13				33	60	194	138	82	46
3	25	28	13				36	82	192	133	171	44
4	26	32	10				39	90	203	129	145	45
5	27	32					40	90	220	128	130	51
6	27	31					41	90	235	127	127	52
7	27	32					40	90	233	126	129	48
8	27	34					39	90	224	124	119	43
9	29	34					39	90	210	119	101	40
10	33	33					40	90	198	113	81	38
11	36	26					38	88	192	110	69	36
12	35	23					30	90	199	110	62	34
13	33	22				20	29	97	224	116	60	32
14	31	20				23	29	115	230	114	59	31
15	32	20				39	29	132	221	101	59	30
16	34	20				76	33	152	214	90	66	30
17	34	21				87	40	174	222	86	73	31
18	35	23				82	47	208	227	90	90	36
19	33	23				80	53	214	222	100	96	37
20	34	22				78	47	228	214	110	84	34
21	38	20				69	41	275	213	118	70	31
22	41	20				70	38	303	209	118	58	29
23	37	21				65	35	303	206	107	52	31
24	35	20				64	37	277	200	94	49	35
25	37	20				51	39	267	188	87	50	37
26	41	19				52	39	234	179	87	46	37
27	32	17				58	39	205	180	91	44	37
28	28	15				54	38	194	179	99	46	36
29	31	15				48	38	198	172	118	55	37
30	35	15				37	41	208	162	107	59	37
31	37					33		209		86	53	
TOTAL	1001	726	50			1086	1139	4990	6160	3427		1134
MEAN	32.3	24.2	12.5			57.2	38.0	161	205	111		37.8
AC-FT	1990	1440	99			2150	2260	9900	12220	6800		2250
MAX	41	36	14			87	53	303	235	151		52
MIN	25	15	10			20	29	47	162	86	44	29
CAL YR	2006	TOTAL	15026	MEAN	55 MAX	228	MIN	10	AC-FT	29800	(PARTIAL YEA	AR RECORD)

MAX DISCH: 315 CFS AT 03:15 ON May. 23, 2007 GH 4.03 FT. SHIFT -0.22 FT. MAX GH: 4.03 FT. AT 03:15 ON May. 23, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

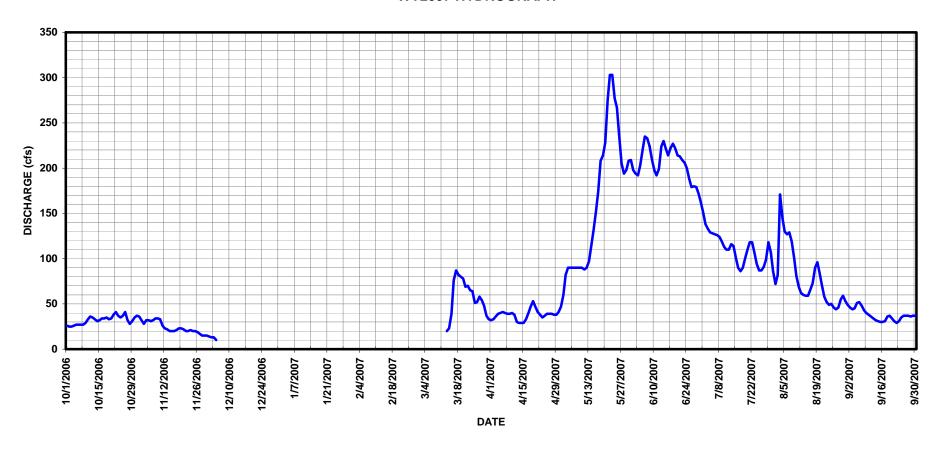
22170 MEAN

WTR YR 2007

TOTAL

83 MAX 303 MIN 10 AC-FT 43970 (PARTIAL YEAR RECORD)

## TARRYALL CREEK BELOW TARRYALL RESERVOIR CO WY2007 HYDROGRAPH



#### 06701500 SOUTH PLATTE RIVER BELOW CHEESMAN LAKE, CO

LOCATION.--Lat 39°12'33", long 105°16'06", in SE4NW4 sec.6, T.10 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank 1,400 ft downstream from toe of Cheesman Dam and 3.8 mi southwest of Deckers.

DRAINAGE AREA AND PERIOD OF RECORD.--1,752 mi<sup>2</sup>. Oct.1, 1924-May 13, 1956 at site 370 feet upstream and 0.50 ft. higher. May 14, 1956 to present at current site. Unreliable record from 1909 to 1924 unpublished.

GAGE.--Water-stage recorder with satellite telemetry in a wooden shelter at a 30 ft Parshall flume. Datum of gage is 6,609 ft. Station is owned and maintained by the Denver Water Dept. Satellite telemetry is maintained by the U.S. Army Corps of Engineers and the USGS.

REMARKS.--The primary record is hourly data taken from satellite monitoring with chart back up. Satellite data agreed with the recorder data within  $\pm 0.02$  foot. The record is reliable and complete. Missing DCP data were filled in using the chart data on April 20, May 8, and Sept 19-20, 2007, without loss of accuracy. The record is considered good. Station maintained and record developed by Steve Barrett.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE.--PLACHECO11 USED FROM 01-OCT-2006 TO 30-SEP-2007

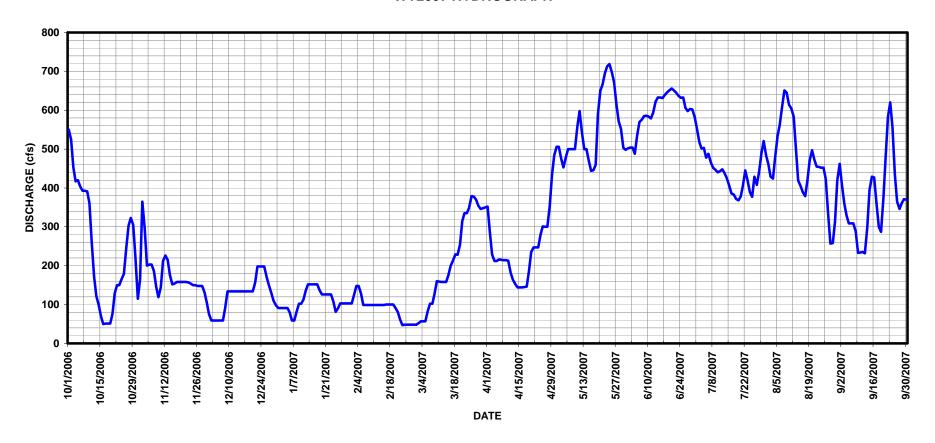
	MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	550	165	75	91	103	48	352	506	502	552	462	462		
2	524	365	59	91	126	52	287	506	504	518	429	408		
3	453	295	59	91	148	57	229	475	504	501	424	360		
4	417	200	59	91	148	57	212	453	488	503	480	329		
5	420	203	59	80	128	57	212	479	533	478	534	309		
6	404	203	59	59	99	83	216	500	570	488	563	309		
7	393	186	59	59	99	102	215	500	575	466	607	309		
8	393	146	92	81	99	102	214	500	585	452	651	288		
9	391	119	134	102	99	129	214	500	586	447	645	233		
10	361	144	134	102	99	160	213	558	584	440	614	234		
11	262	212	134	112	99	159	182	598	579	443	605	235		
12	172	226	134	136	99	158	164	545	594	448	584	232		
13	122	215	134	152	99	158	153	500	622	438	501	299		
14	99	176	134	152	99	158	144	500	633	424	419	395		
15	70	152	134	152	99	175	144	469	633	406	405	429		
16	50	154	134	152	100	200	144	444	631	386	389	427		
17	51	158	134	152	100	213	145	446	639	383	379	363		
18	51	158	134	137	100	229	146	460	646	372	420	300		
19	51	158	134	126	100	228	186	589	651	368	471	287		
20	76	158	134	126	91	254	235	650	656	378	497	375		
21	129	158	157	126	81	314	247	666	651	405	473	481		
22	150	157	198	126	61	335	247	696	645	445	455	582		
23	150	154	198	126	47	335	247	713	637	420	454	620		
24	166	150	198	107	48	349	279	719	632	389	452	556		
25	179	150	198	81	48	379	301	698	633	377	452	434		
26	247	148	171	90	48	378	300	672	606	429	423	365		
27	303	148	150	103	48	370	300	614	598	408	332	346		
28	323	148	130	103	48	354	354	571	603	440	257	361		
29	305	131	110	103		346	433	552	602	489	258	371		
30	221	105	99	103		348	484	503	582	521	314	370		
31	115		91	103		350		498		484	419			
TOTAL	7598	5242	3829	3415	2563	6637	7199	17080	17904	13698	14368	11069		
MEAN	245	175	124	110	91.5	214	240	551	597	442	463	369		
AC-FT	15070	10400	7590	6770	5080	13160	14280	33880	35510	27170	28500	21960		
MAX	550	365	198	152	148	379	484	719	656	552	651	620		
MIN	50	105	59	59	47	48	144	444	488	368	257	232		
CAL YR	2006	TOTAL	70261	MEAN	192 MAX	55	52 MIN	50	AC-FT	139360				

MAX DISCH: 737 CFS AT 23:15 ON May. 23, 2007 GH 3.27 FT. SHIFT 0 FT. MAX GH: 3.27 FT. AT 23:15 ON May. 23, 2007

WTR YR 2007 TOTAL 110602 MEAN 303 MAX 719 MIN 47 AC-FT 219400

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 06701500 SOUTH PLATTE RIVER BELOW CHEESMAN LAKE CO WY2007 HYDROGRAPH



06706000 NORTH FORK SOUTH PLATTE RIVER BELOW GENEVA CREEK AT GRANT, CO

LOCATION.--Lat 39°27'26", long 105°39'29" in NW44 sec. 10, T.7 S., R.74 W., Park County, Hydrologic Unit 10190002, on left bank at Grant, 1,550 ft downstream from Geneva Creek, and 1.3 mi downstream from east portal of Harold D. Roberts tunnel.

DRAINAGE AREA AND PERIOD OF RECORD. -- 127 mi2; 1948 to present.

GAGE. -- A graphic water stage recorder and satellite monitoring equipment in a wooden shelter over a concrete well at a concrete trapezoidal channel section and spillway. The gage has power and is equipped with heat lamps and tapes to prevent freezing of the stilling well and intakes. The station is owned and maintained by the Denver Water Department. The satellite equipment is owned by the Office of the State Engineer. The Sutron 8200 Data Collection Platform (DCP) was replaced with a Sutron SatLink2 high data rate DCP on 7/19/2007.

REMARKS.--The primary record is hourly data taken from satellite monitoring with chart back up. The record is complete and reliable, except for periods when Roberts's tunnel was off and the gage was affected by ice: October 26-31, November 10-27, December 6-31, 2006, Jan 1-31, Feb 1-28, and March 1-8, 2007. Rapid changes in stage are caused by the regulation of Roberts Tunnel located ½ mile upstream. When Roberts Tunnel is operating, the gage is free from ice. The record is good, except during periods of ice affected record, which are estimated and fair to poor. Station maintained and record developed by Mike Wild.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

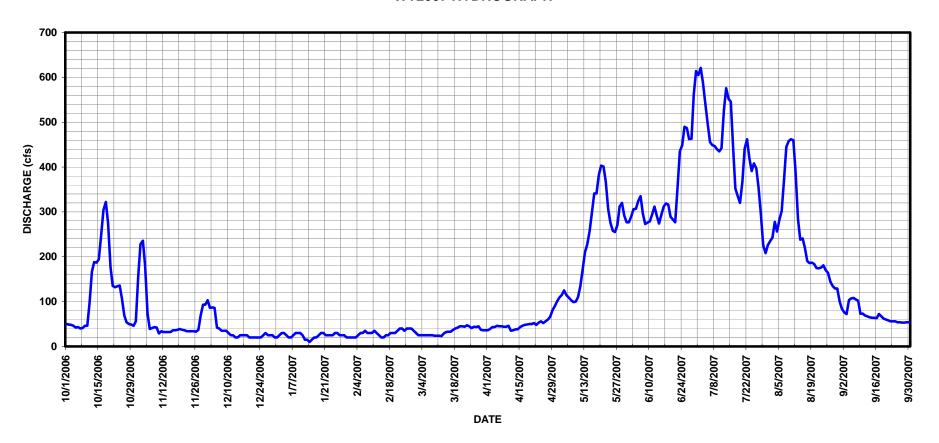
RATING TABLE. -- PLAGRACO12 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	AN VALUES	3					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	157	103	25	20	30	36	101	277	605	235	84
2	49	228	86	30	20	25	39	109	290	621	243	76
3	48	236	87	30	20	25	43	115	306	588	278	72
4	46	180	86	25	25	25	43	125	307	541	256	103
5	42	74	42	20	30	25	46	114	324	498	283	107
6	43	39	40	20	30	25	45	109	335	456	302	108
7	40	41	35	25	35	25	45	103	297	449	373	105
8	41	43	35	30	30	25	44	99	273	447	445	102
9	46	42	35	30	30	24	44	100	276	440	458	73
10	46	29	30	30	30	24	46	110	279	435	462	73
11	96	34	25	25	35	24	35	134	294	442	460	69
12	167	32	25	15	30	23	36	170	312	527	388	67
13	188	32	20	15	25	29	38	210	292	576	284	65
14	187	32	20	10	20	32	38	227	274	552	238	64
15	194	32	25	15	20	33	43	257	293	546	241	64
16	249	36	25	20	25	33	46	297	312	440	220	63
17	304	36	25	20	25	37	48	341	319	352	190	72
18	322	37	25	25	30	40	49	341	316	335	186	67
19	275	39	20	30	30	42	50	383	289	320	187	62
20	178	37	20	30	30	45	50	403	283	367	184	60
21	135	36	20	25	35	45	52	401	277	441	175	58
22	132	34	20	25	40	44	48	368	356	462	174	56
23	134	34	20	25	40	47	53	307	435	421	176	56
24	136	34	20	25	35	45	56	276	449	391	181	56
25	107	34	25	30	40	41	52	258	490	408	170	54
26	69	33	30	30	40	44	56	255	487	397	164	54
27	54	37	25	25	40	43	60	271	462	354	144	53
28	50	69	25	25	35	45	66	312	463	293	135	53
29	49	93	25	25		37	81	320	562	226	129	54
30	46	93	20	20		36	90	292	614	208	129	54
31	56		20	20		36		277		226	100	
TOTAL	3579	1913	1059	745	845	1054	1478	7185	10543	13364	7590	2104
MEAN	115	63.8	34.2	24.0	30.2	34.0	49.3	232	351	431	245	70.1
AC-FT	7100	3790	2100	1480	1680	2090	2930	14250	20910	26510	15050	4170
MAX	322	236	103	30	40	47	90	403	614	621	462	108
MIN	40	29	20	10	20	23	35	99	273	208	100	53
CAL YR	2006	TOTAL		EAN	201 MAX	703		20	AC-FT	145700		
WTR YR	2007	TOTAL	51459 M	EAN	141 MAX	621	MIN	10	AC-FT	102100		

MAX DISCH: 649 CFS AT 10:00 ON Jul. 2, 2007 GH 1.95 FT. SHIFT -0.07 FT. MAX GH: 1.95 FT. AT 10:00 ON Jul. 2, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06706000 NORTH FORK SOUTH PLATTE RIVER BELOW GENEVA CREEK AT GRANT CO WY2007 HYDROGRAPH



#### 06707500 SOUTH PLATTE RIVER AT SOUTH PLATTE, CO

LOCATION.--Lat 39°24'32", long 105°10'12", SE<sup>1</sup>4 sec. 25, T.7 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank at South Platte, 200 ft downstream from bridge on State Highway 75, and 400 ft downstream from North Fork.

DRAINAGE AREA AND PERIOD OF RECORD. -- 2,579 mi<sup>2</sup>; Jan. 1896 to present.

GAGE.--A graphic water stage recorder and satellite monitoring equipment (Sutron 8210 DCP and shaft encoder) in a concrete shelter and 60-inch CMP well. The primary gage is an electric tape gage mounted on the equipment shelf. The gage is on Denver Water Board property.

REMARKS.--The primary record is hourly data taken from satellite readings with chart back up. The record is complete and reliable, except for the following days when ice affected the stage-discharge relationship: November 29-30, December 1-7, 22, 2006, January 9-31, and February 1-6, 2007. These time periods were compared to Denver Water Department Inflows into Strontia Reservoir and also compared to trends in releases from Cheeseman Reservoir added to flows at the station at Grant. The record is good, except for the periods of ice affected record, which are estimated and considered poor. Station maintained and record developed by Steve Barrett.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

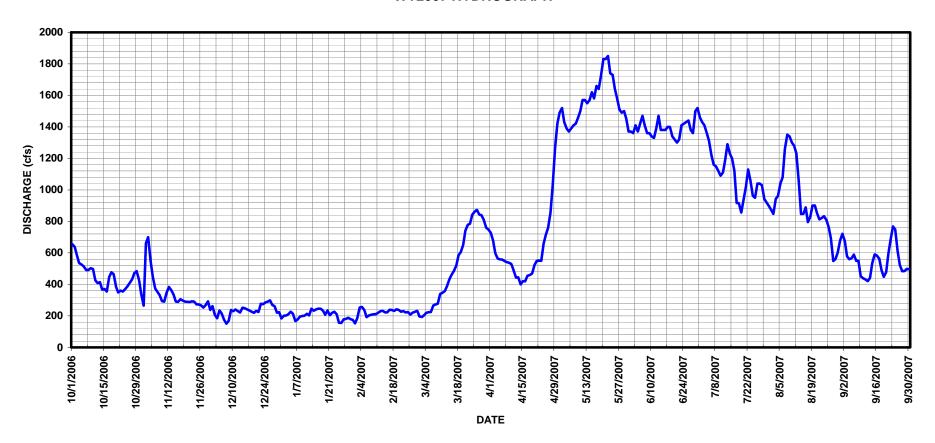
RATING TABLE.--PLASPLCO16 USED FROM 01-OCT-2006 TO 30-SEPT-2007

			DISCH	ARGE, IN C	ME	AN VALUE		IO SEFIE	MDER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	655	265	262		152	197	727	1490	1370	1460	873	721
2	638	661	206		186	193	680	1520	1360	1430	847	675
3	584	700	185		253	204	598	1430	1410	1410	943	578
4	535	551	235		257	219	564	1390	1370	1360	962	560
5	526	448	214		238	223	559	1370	1420	1310	1040	566
6	514	374	177		192	224	558	1390	1470	1220	1080	589
7	492	353	150		202	266	549	1410	1410	1160	1260	550
8	492	332	168		207	272	541	1420	1360	1150	1350	548
9	503	294	238		210	277	537	1460	1360	1120	1340	451
10	498	291	230		211	339	529	1500	1340	1090	1300	439
11	427	344	241		219	346	490	1570	1330	1110	1280	432
12	407	384	231		230	358	443	1570	1390	1190	1230	421
13	414	365	221		233	389	445	1550	1470	1290	1050	441
14	368	336	252		222	431	400	1570	1380	1230	846	534
15	371	292	249		222	462	421	1620	1380	1200	848	590
16	355	288	242		239	486	419	1580	1380	1120	889	583
17	447	306	235		238	520	455	1660	1400	917	795	563
18	477	298	227		232	585	459	1640	1400	915	830	491
19	464	290	219		242	605	469	1730	1340	856	900	448
20	384	289	233		238	651	521	1830	1320	936	901	477
21	348	287	224		227	740	548	1830	1300	1020	850	595
22	361	293	277		231	778	551	1850	1320	1130	813	689
23	355	291	274		221	785	550	1740	1410	1060	822	768
24	370	273	285		224	842	658	1730	1420	963	833	750
25	388	272	290		208	861	715	1640	1430	950	809	613
26	409	267	299		220	874	759	1580	1440	1040	765	523
27	433	253	269		225	843	854	1510	1380	1040	693	483
28	472	268	262		233	839	1030	1490	1360	1030	548	485
29	485	293	220			810	1270	1500	1500	942	561	498
30	428	238	223			760	1420	1450	1520	920	603	497
31	337		184	175		749		1370		897	680	
TOTAL	13937	10196	7222		6212	16128	18719	48390	41740	34466	28541	16558
MEAN	450	340	233		222	520	624	1561	1391	1112	921	552
AC-FT	27640	20220	14320		12320	31990	37130	95980	82790	68360	56610	32840
MAX	655	700	299		257	874	1420	1850	1520	1460	1350	768
MIN	337	238	150	155	152	193	400	1370	1300	856	548	421
CAL YR	2006	TOTAL	166001		455 MAX	111			AC-FT	329260		
WTR YR	2007	TOTAL	248480	MEAN	681 MAX	185	0 MIN	150	AC-FT	492900		

MAX DISCH: 1920 CFS AT 07:00 ON May. 20, 2007 GH 5.28 FT. SHIFT -0.08 FT. MAX GH: 5.28 FT. AT 07:00 ON May. 20, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

### 06707500 SOUTH PLATTE RIVER AT SOUTH PLATTE CO WY2007 HYDROGRAPH



06707501 SOUTH PLATTE RIVER BELOW STRONTIA SPRINGS RESERVOIR, CO

LOCATION.--Lat 39°26'00", long 105°07'30", SW4SW4 sec. 16, T.7 S., R.69 W., Douglas County, on right bank 1/4 mi downstream from Strontia Springs Dam.

DRAINAGE AREA AND PERIOD OF RECORD. -- 2,596 mi<sup>2</sup>; 1983 to present.

GAGE.--A Stevens A-70 graphic water stage recorder, satellite monitoring data collection platform with digital shaft encoder installed in a formed concrete shelter. An adjustable reference point with a graduated tape on the float drive for the recorder is used for referencing. An adjustable reference for a drop tape is located below the well manhole. An outside staff gage is used as an additional reference.

REMARKS.--Record is complete and reliable, except for Dec. 22-25, 31, 2006; Jan. 1-3, 6-8, 12-31; and Feb 1, 2007, when ice affected the stage-discharge relationship. The record is good, except for periods of ice affected record, which were estimated and are considered fair. Station maintained and record developed by Jana Ash.

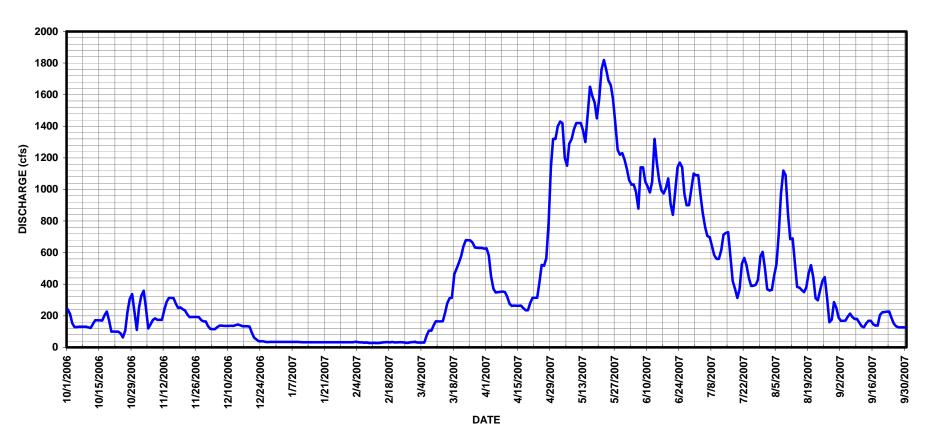
RATING TABLE.--PLASTRCO03 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHAR	GE, IN CFS		EAR OCTOBE	ER 2006	TO SEPTE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	241	253	135	34	32	34	627	1320	1130	1090	369	188
2	211	326	117	34	32	30	583	1400	1060	1090	360	168
3	153	359	116	34	35	30	451	1430	1030	966	364	168
4	129	255	115	34	33	30	371	1420	1030	852	451	169
5	129	120	128	34	31	30	348	1200	984	762	528	194
6	131	145	138	34	31	76	350	1150	878	705	714	214
7	131	173	138	34	29	106	352	1290	1140	697	972	192
8	131	183	136	34	30	105	354	1320	1140	640	1120	179
9	131	174	136	34	27	139	351	1380	1050	584	1090	180
10	127	174	136	33	27	165	321	1420	1020	560	843	156
11	123	174	137	32	28	164	276	1420	981	560	685	134
12	149	240	136	32	27	164	262	1420	1050	616	690	127
13	172	288	141	32	27	165	264	1370	1320	714	537	152
14	171	313	145	32	28	218	263	1300	1170	724	383	168
15	171	313	140	32	31	280	263	1480	1060	729	378	168
16	169	312	134	32	32	312	264	1650	995	577	363	147
17	204	276	134	32	33	314	248	1590	974	419	350	139
18	227	249	134	32	31	463	235	1550	1010	372	380	138
19	169	253	132	32	34	497	235	1450	1070	313	467	205
20	99	241	94	32	31	537	280	1580	907	370	521	222
21	100	234	62	32	31	579	314	1760	839	528	447	224
22	99	209	51	32	32	639	314	1820	982	566	311	226
23	99	191	39	32	32	679	314	1760	1140	521	298	227
24	88	192	39	32	31	679	411	1690	1170	440	361	187
25	63	192	39	32	28	677	522	1660	1140	389	421	150
26	107	192	34	32	28	662	517	1570	973	390	445	134
27	226	191	33	32	32	632	565	1410	900	396	311	127
28	307	173	34	32	33	630	790	1250	901	429	159	127
29	337	164	34	32		629	1140	1220	1000	574	175	127
30	228	164	34	32		629	1320	1230	1100	605	287	127
31	110		34	32		625		1190		495	252	
TOTAL	4932	6723	3055	1011	856	10919	12905	44700	31144	18673	15032	5064
MEAN	159	224	98.5	32.6	30.6	352	430	1442	1038	602	485	169
AC-FT	9780	13340	6060	2010	1700	21660	25600	88660	61770	37040	29820	10040
MAX	337	359	145	34	35	679	1320	1820	1320	1090	1120	227
MIN	63	120	33	32	27	30	235	1150	839	313	159	127
CAL YR WTR YR	2006 2007	TOTAL TOTAL	67569 MI 155014 MI		185 MAX 425 MAX	1090 1820	MIN MIN	30 27	AC-FT AC-FT	134020 307500		

MAX DISCH: 1840 CFS AT 12:00 ON May. 21, 2007 GH 6.06 FT. SHIFT -0.01 FT. MAX GH: 6.06 FT. AT 12:00 ON May. 21, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06707501 SOUTH PLATTE RIVER BELOW STRONTIA SPRINGS RESERVOIR CO WY2007 HYDROGRAPH



#### 06708000 SOUTH PLATTE RIVER AT WATERTON, CO

LOCATION.--Lat 39°29'18", long 105°05'32", in NE4 sec. 34, T.6 S., R.69 W., Jefferson County, Hydrologic Unit 10190002, on left bank 168 ft downstream from bridge on State Highway 221, 0.4 mi south of Waterton, 4.7 mi west of Louviers, and 6 mi upstream from Plum Creek.

DRAINAGE AREA AND PERIOD OF RECORD. -- 2,621 mi<sup>2</sup>; 1926 to present.

GAGE. -- Graphic stage recorder and shaft encoder (on separate floats), satellite monitoring DCP with a phone modem in a 60-inch galvanized, corrugated steel shelter and well. The primary reference is an electric drop tape. The gage has power and is equipped with heat lamps to prevent the well from freezing. The DCP is state-owned, but the phone card is owned by the USACOE and maintained by the USGS. The gage is owned and maintained by Denver Water Department. Datum of gage 5,484.43 ft National Geodetic Vertical Datum, adjustment of 1912.

REMARKS.--The primary record is hourly data taken from satellite monitoring with chart back up. The record is complete and reliable, except for November 30, December 1-3, 28, 2006, which had possible slight ice effect. The record is rated good, except for days of possible ice effect, which are fair. Station maintained and record developed by Jana Ash.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

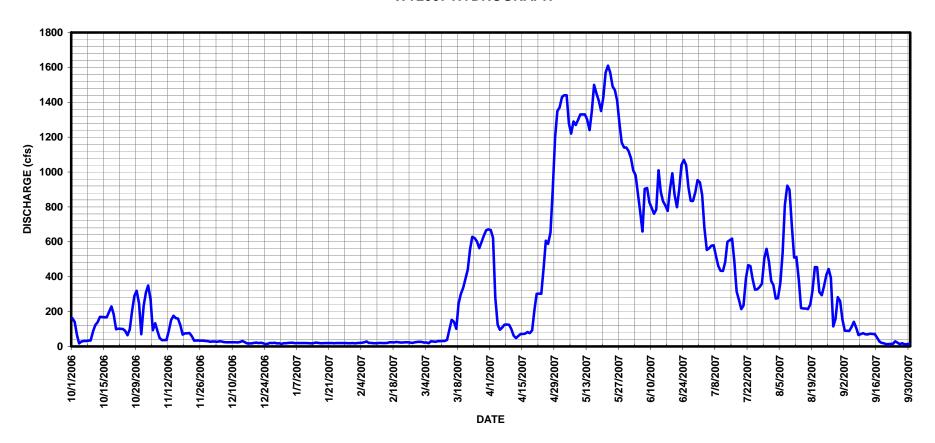
RATING TABLE. -- PLAWATCO10 USED FROM 01-OCT-2006 TO 30-SEPT-2007

			DISCII	ANGE, IN C		EAN VALUE		IO SEFIE	MDER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	234	28	18	17	27	667	1370	1080	941	375	155
2	139	309	28	18	19	26	622	1430	1010	868	352	90
3	66	350	27		20	22	282	1440	982	680	274	90
4	17	270	29		21	23	124	1440	879	553	277	89
5	28	93	28		24	18	95	1280	778	562	367	112
6	31	133	25		28	29	108	1220	659	578	538	141
7	31	91	24		20	28	125	1290	904	580	811	106
8	33	49	24		20	27	126	1270	908	519	922	65
9	34	36	24		18	30	124	1300	827	461	898	71
10	86	37	24		18	30	99	1330	795	434	685	76
11	122	37	24		19	31	62	1330	761	433	509	70
12	139	92	23		20	31	48	1330	784	484	514	69
13	170	151	26		19	38	60	1300	1010	600	383	73
14	169	176	31		19	94	72	1240	885	609	220	72
15	168	162	25		20	153	72	1350	832	618	217	72
16	168	160	17		24	141	73	1500	807	484	217	52
17	200	121	17		24	101	83	1450	777	315	214	29
18	229	68	17		23	245	76	1410	898	269	241	20
19	184	75	20		26	300	93	1350	993	214	319	18
20	98	75	22		24	337	207	1430	871	235	455	13
21	102	77	19		22	385	302	1570	798	389	454	14
22	101	58	21		23	440	303	1610	899	466	312	15
23	100	33	18		24	554	302	1570	1040	461	294	15
24	90	34	13		24	628	448	1490	1070	381	345	29
25	64	34	16		22	621	606	1470	1040	326	411	21
26	98	33	20		20	603	588	1410	911	328	444	13
27	206	33	19		24	563	653	1280	835	341	394	18
28	290	31	21		26	598	897	1170	834	360	115	13
29	319	30	17			634	1200	1140	885	505	159	13
30	247	27	18			666	1350	1140	953	560	283	16
31	70		15	19		672		1120		486	260	
TOTAL	3961	3109	680	587	608	8095	9867	42030	26705	15040	12259	1650
MEAN	128	104	21.9	18.9	21.7	261	329	1356	890	485	395	55.0
AC-FT	7860	6170	1350	1160	1210	16060	19570	83370	52970	29830	24320	3270
MAX	319	350	31	22	28	672	1350	1610	1080	941	922	155
MIN	17	27	13	17	17	18	48	1120	659	214	115	13
CAL YR	2006	TOTAL	38865	MEAN	106 MAX	83	33 MIN	12	AC-FT	77090		
WTR YR	2007	TOTAL	124591	MEAN	341 MAX	161	10 MIN	13	AC-FT	247100		

MAX DISCH: 1630 CFS AT 13:00 ON May. 21, 2007 GH 2.86 FT. SHIFT -0.02 FT. MAX GH: 2.86 FT. AT 13:00 ON May. 21, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 06708000 SOUTH PLATTE RIVER AT WATERTON CO WY2007 HYDROGRAPH



#### 06709610 SOUTH PLATTE RIVER BELOW CHATFIELD RESERVOIR, CO

LOCATION.--Lat 39°33'26", long 105°03'27", SE4, sec. 1, T.6 S., R.69 W., Jefferson County, Hydrologic Unit 10190002.

DRAINAGE AREA AND PERIOD OF RECORD. -- 3,018 mi<sup>2</sup>; Jan. 1, 1985 to present.

GAGE.--A Stevens A-70 graphic water stage recorder and satellite monitoring DCP and shaft encoder installed in a formed concrete well and shelter. The DCP is owned and maintained by the DWR. An electric drop tape is used for referencing. There is no outside reference.

**REMARKS.**—The primary record is hourly satellite data with chart back up. Daily max and min values agreed with the corrected chart values to within  $\pm 0.02$  foot. The record is complete and reliable. High flow measurements made this water year showed conflicting results with significant shift differences at similar gage heights. The record is good, except flows above 800 cfs are fair due to inconsistencies in high flow measurement results, and flows below 2 cfs are fair, due to lack of recent validation of the rating. Station maintained by Jana Ash and record developed by Jana Ash and Bob Cooper.

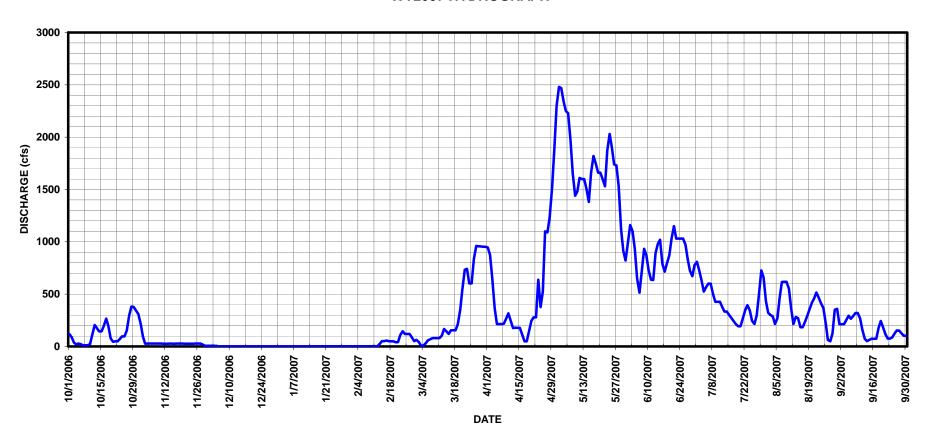
RATING TABLE.--PLACHACO03 USED FROM 01-OCT-2006 TO 30-SEP--2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	217	6.5	.42	1.3	62	945	2300	995	809	321	213
2	87	95	6.5	.42	1.2	42	875	2480	1160	730	301	212
3	36	26	6.5	.42	1.2	7.3	650	2470	1100	637	287	212
4	20	27	4.2	.42	1.2	7.1	365	2340	930	524	214	252
5	27	27	.51	.44	1.2	29	214	2250	651	565	269	293
6	21	27	.51	.42	1.1	58	214	2230	513	601	464	264
7	9.9	27	.51	.42	1.1	69	214	1970	712	599	616	291
8	10	27	.49	.42	1.2	80	216	1650	932	504	617	320
9	10	27	.42	.42	1.1	80	265	1440	871	426	617	320
10	23	27	.42	.42	1.1	80	317	1480	729	426	552	268
11	112	26	.44	.43	1.1	80	249	1610	638	426	363	159
12	205	26	.43	.51	1.1	103	176	1600	635	377	214	73
13 14	175 144	26 27	.43	.51	24	166 145	179 178	1600 1500	892 978	333 333	281 270	50 63
14	144	26	.42	.51 .53	51 51	145	178	1380	1020	333	183	63 74
16	196	26	.36	.53	57	155	114	1660	787	272	183	73
17	266	27	.36	.95	50	155	49	1820	714	241	233	73
18	193	27	.36	1.5	49	155	49	1750	793	212	294	174
19	76	27	.36	1.5	49	213	151	1660	870	192	353	243
20	44	26	.48	1.4	39	349	245	1660	1030	192	418	181
21	49	26	.45	1.5	42	545	278	1600	1150	271	459	118
22	49	26	.42	1.4	109	732	279	1530	1030	345	515	75
23	72	26	.42	1.4	145	742	637	1870	1030	395	465	75
24	97	26	.42	1.4	120	602	376	2030	1030	344	413	86
25	97	27	.39	1.4	120	602	526	1900	1030	245	367	124
26	152	27	.36	1.4	120	837	1100	1740	973	214	228	153
27	295	27	.36	1.4	87	960	1090	1730	834	295	63	152
28	380	18	.39	1.4	51	957	1240	1530	723	493	49	126
29	378	6.5	.38	1.4		955	1520	1120	671	726	125	102
30	343	6.5	.36	1.4		953	1890	911	776	661	350	101
31	310		.38	1.3		952		821		431	360	
TOTAL	4140.9	1007.0	34.93	27.97	1177.9	10992.4	14778	53632	26197	13120	10444	4920
MEAN	134			.90	42.1	355	493	1730	873	423	337	164
AC-FT	8210	2000	69	55	2340	21800	29310	106400	51960	26020	20720	9760
MAX	380	217	6.5	1.5	145	960	1890	2480	1160	809	617	320
MIN	9.9	6.5	.36	.42	1.1	7.1	49	821	513	192	49	50
CAL YR	2006		488.34 ME		94.5 MA				AC-FT	68410		
WTR YR	2007	TOTAL 14	0472.1 ME	AN	385 MA	X 248	0 MIN	.36	AC-FT	278600		

MAX DISCH: 2510 CFS AT 19:30 ON May. 1, 2007 GH 5.37 FT. SHIFT 0.11 FT. MAX GH: 5.37 FT. AT 19:30 ON May. 1, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

### 06709610 SOUTH PLATTE RIVER BELOW CHATFIELD RESERVOIR CO WY2007 HYDROGRAPH



#### 06710500 BEAR CREEK AT MORRISON, CO

LOCATION.--Lat 39°39'11", long 105°11'44", in SE4SW4 sec. 35, T.4 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank at Morrison, 180 ft upstream from bridge on State Highway 8 and 0.2 mi upstream from Mount Vernon Creek.

DRAINAGE AREA AND PERIOD OF RECORD.--164 mi<sup>2</sup>. Sporadic, incomplete data Sep. 1881 to Feb. 1902. Good data October 1919 to current year. Monthly data for some periods only. Some early years published as near Morrison, at Starbuck, at Idledale. Water quality data from Oct. 1976 to Sep. 1981.

GAGE.--Stevens A-35 graphic stage recorder and satellite monitoring DCP with telephone access in a 60-inch metal shelter and 48 inch well. Primary reference gage is a drop tape within the well referenced to an adjustable RP on the instrument shelf. There is no outside gage. Control is a compound weir and forms gage pool. A bank-operated cableway at the gage is used for high flow measurements.

REMARKS.--Hourly data is the primary record, taken from satellite monitoring with chart back-up. Accuracy was maintained by 35 visits to the gage. The record is complete and reliable, except for the following periods: Nov. 29, 2006 - Feb 28, 2007, when the gage height was ice affected; and March 20 - April 2, May 14-18, 2007, due to debris on the control. The record is good, except as follows: December 6-20, 2006, January 25-28, February 19-21, 2007, which were estimated and are considered poor; and November 29-December 5, 2006, January 4, 13, 17, 21-24, 29-31, February 22-28, 2007, which are fair due to possible ice effect; and March 20 - April 2, 2007; May 14-18, 2007, which are considered fair due to debris on the control. Station maintained and record developed by Steve Barrett.

RATING TABLE. -- BCRMORCO23 USED FROM 01-OCT-2006 TO 30-SEPT-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

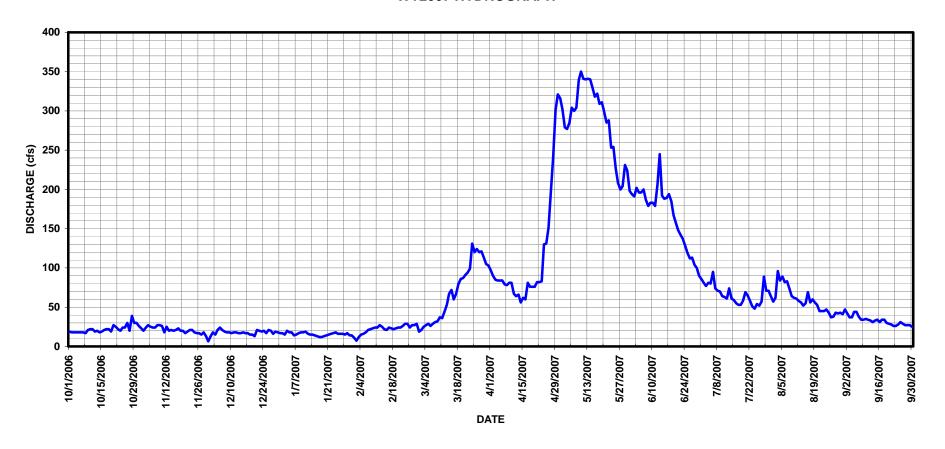
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	23	13	17	11	19	97	316	194	86	57	47
2	18	20	18	15	7.4	21	90	302	191	81	62	42
3	18	24	15	20	12	25	85	279	202	77	96	37
4	18	27	21	18	15	27	84	277	196	81	84	37
5	18	25	24	18	16	29	84	285	196	80	89	44
6	18	24	21	14	18	26	84	304	200	95	82	44
7	18	24	19	15	21	29	79	300	187	74	83	38
8	17	27	18	17	22	31	78	304	179	71	74	34
9	21	27	18	18	23	32	81	339	183	70	64	34
10	22	26	17	18	24	37	81	350	183	64	62	35
11	22	18	18	19	24	36	67	341	179	63	61	34
12	19	25	18	16	27	44	64	340	206	61	58	33
13	20	20	17	15	25	53	66	341	245	74	56	31
14	18	21	17	15	22	67	56	340	192	61	52	33
15	19	20	18	14	21	72	62	329	188	59	55	34
16	21	21	17	13	24	60	60	318	189	55	69	31
17	22	23	17	12	23	67	81	322	194	53	56	34
18	22	20	15	12	22	79	76	309	185	53	60	34
19	19	20	15	13	23	86	76	311	167	58	56	30
20	27	17	13	14	24	87	76	299	157	69	53	29
21	25	19	21	15	24	91	82	285	148	65	45	28
22	22	21	20	16	26	94	82	288	142	58	45	26
23	20	21	19	17	29	99	83	253	137	51	45	26
24	24	18	20	18	29	131	130	254	128	48	47	28
25	24	17	17	16	24	120	131	226	119	54	43	31
26	30	17	21	16	27	124	151	208	112	52	37	29
27	20	15	20	16	27	129	198	200	113	57	38	27
28	39	18	16	15	29	121	241	204	104	89	43	27
29	30	13	19	17		113	301	231	100	71	42	27
30	30	6.5	18	14		105	321	224	90	71	43	25
31	26		17	14		103		198		64	41	
) I	20		Ι/	1.4		103		190		04	4.1	
TOTAL	686	617.5	557	487	619.4	2148	3247	8877	5006	2065	1798	989
MEAN	22.1	20.6	18.0	15.7	22.1	69.3	108	286	167	66.6	58.0	33.0
AC-FT	1360	1220	1100	966	1230	4260	6440	17610	9930	4100	3570	1960
MAX	39	27	24	20	29	131	321	350	245	95	96	47
MIN	17	6.5	13	12	7.4	19	56	198	90	48	37	25
	- /	0.0	10	12	, • •		2.0	100	30	10	<i>3</i> /	20
03 T 11D	0000	moma r	7.610.4		00 0 2077	1.0			30 55	1 - 1 1 0		

CAL YR 2006 TOTAL 7619.4 MEAN 20.9 MAX 186 MIN 6.2 AC-FT 15110 WTR YR 2007 TOTAL 27096.9 MEAN 74.2 MAX 350 MIN 6.5 AC-FT 53750

MAX DISCH: 376 CFS AT 05:45 ON May. 10, 2007 GH 7.43 FT. SHIFT -0.09 FT. MAX GH: 7.51 FT. (GH CORR. = -0.10 FT.) AT 03:30 ON May. 16, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 06710500 BEAR CREEK AT MORRISON CO WY2007 HYDROGRAPH



#### 06711500 BEAR CREEK AT MOUTH, AT SHERIDAN, CO

LOCATION.--Lat 39°39'09", long 105°01'59", in NW4NW4 sec. 5, T,5 S., R.68 W., Arapahoe County, Hydrologic Unit 10190002 on left bank just downstream from bridge on South Lowell Blvd., at Highway Department maintenance building at northwest city limits of Sheridan, 1.3 mi upstream from mouth, and 2.1 mi west of city hall in Englewood.

DRAINAGE AREA AND PERIOD OF RECORD.--260 mi<sup>2</sup>. April to Nov. 1914, March 1927 to current year. Monthly data only prior to Oct. 1933.

GAGE.--Stevens A-35 graphic stage recorder and Sutron 8210 DCP with digital shaft encoder and phone (speech card) modem in a 42-inch corrugated metal shelter and well.

REMARKS.--The primary record is hourly data from satellite with chart back-up. Hourly values were taken from the chart (due to missing DCP data) on the following days: July 26-27, 2007 and August 7, 2007. The data are complete and reliable, except for the following days: November 30, December 3-4, 20-22, 31, 2006, January 2, 6-7, January 28-30, February 1-4, 2007, due to ice effect; and, October 3, 16, November 7-13, 2006, when there was debris on the control. The record is rated as good, except for the following days, which are fair, November 30, December 3-4, 20-22, 31, 2006, January 2, 6-7, 2007, due to possible ice effect; January 28-30, February 1-4, 2007, which are estimated and poor, due to ice effect; and, October 3, 16, November 7-13, 2006, when there was debris on the control. Station maintained and record developed by Steve Barrett.

RATING TABLE.--BCRSHECO32 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
MEAN VALUES

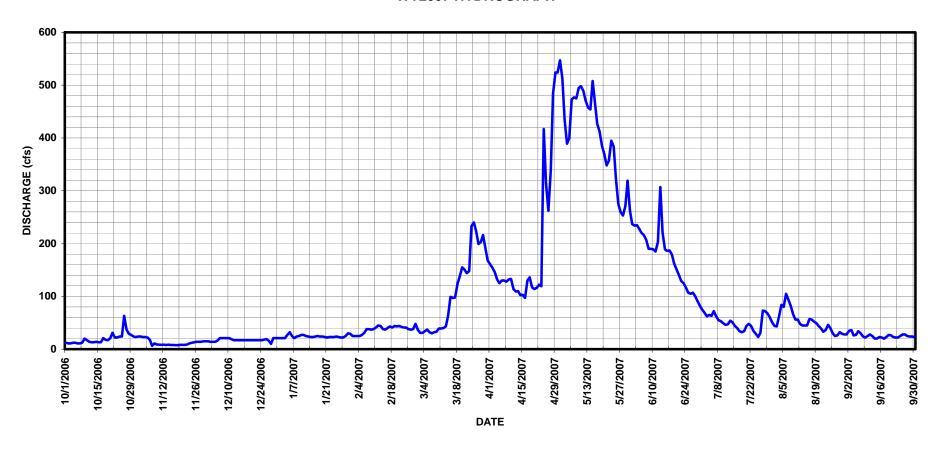
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	24	15	21	25	37	161	547	237	75	44	28
2	11	24	14	21	25	31	154	512	234	69	43	35
3	11	23		21	25	31	146	434	235	62	62	36
4	12	23	14	27	25	34	132	389	228	65	84	26
5	12	22		32	27	37	125	400	220	63	80	27
6	11	18	21	25	31	32	130	473	216	72	105	34
7	11	6.5			38	30	130	477	207	62	94	30
8	12	11			38	32	128	475	190	55	82	24
9	20	8.8			37	33	132	495	190	53	66	22
10	17	8.4		27	38	39	133	498	189	49	56	25
11	14	8.3	19	27	41	39	114	489	185	46	56	28
12	13	8.4			45	40	109	471	203	47	48	25
13	13	8.0			44	43	110	458	307	54	45	20
14	14	8.4	17	23	38	63	102	454	221	51	45	20
15	13	7.9			37	99	103	508	189	44	45	23
16	13	8.0	17		40	97	97	467	186	40	57	22
17	21	7.7			43	98	130	427	187	34	56	20
18	18	7.7			41	124	136	412	179	32	52	23
19	17	8.3	17	24	44	138	117	385	162	34	49	27
20	21	8.3	17	23	43	155	114	370	151	44	44	26
21	31	8.1	17	22	44	151	116	348	141	48	39	23
22	22	8.7	17	23	42	144	122	357	129	44	33	22
23	22	11	17	23	41	148	119	395	125	35	36	22
24	24	12	17	23	41	233	417	384	117	29	46	25
25	24	13	18	24	38	240	315	323	107	23	40	28
26	63	14	19	23	37	224	262	275	105	31	30	28
27	37	14	16	22	38	199	339	260	107	73	25	25
28	29	14	10	22	48	203	484	253	100	72	26	24
29	27	15	21	25		216	524	271	91	68	32	24
30	24	15	21	30		191	524	319	82	60	29	23
31	23		21	29		168		263		51	28	
TOTAL	612	374.5	544	752	1054	3349	5725	12589	5220	1585	1577	765
MEAN	19.7	12.5		24.3	37.6	108	191	406	174	51.1	50.9	25.5
AC-FT	1210	743			2090	6640	11360	24970	10350	3140	3130	1520
MAX	63	24			48	240	524	547	307	75	105	36
MIN	11	6.5			25	30	97	253	82	23	25	20
CAL YR	2006	TOTAL	5541.7		15.2 MAX		38 MIN		AC-FT	10990		

CAL YR 2006 TOTAL 5541.7 MEAN 15.2 MAX 138 MIN 0.85 AC-FT 10990 WTR YR 2007 TOTAL 34146.5 MEAN 93.6 MAX 547 MIN 6.5 AC-FT 67730

MAX DISCH: 778 CFS AT 15:45 ON May. 1, 2007 GH 4.96 FT. SHIFT -0.03 FT. MAX GH: 4.96 FT. AT 15:45 ON May. 1, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

### 06711500 BEAR CREEK AT MOUTH AT SHERIDAN CO WY2007 HYDROGRAPH



## 06714000 SOUTH PLATTE RIVER AT DENVER, CO

LOCATION.--Lat 39°45'35", long 105°00'10", in NW4SE4 sec. 28, T.3 S., R.68 W., Denver County, Hydrologic Unit 10190003, on right bank 90 ft Upstream from Nineteenth Street Bridge in Denver and 0.4 mi downstream from Cherry Creek.

DRAINAGE AREA AND PERIOD OF RECORD.--3,861 mi<sup>2</sup>. May 1889 to Oct. 1890 sporadic record. July 1895 to current year continuous. Monthly data only for some periods.

GAGE.--The shelter is 72 inch by 72 inch precast concrete structure with a 48-inch corrugated steel well. The station uses an electric drop tape, Sutron 8210 satellite telemetry with a phone modem interface (303-297-9505), a continuous chart recorder and a supplemental outside wire weight. A city water line is plumbed to the gage for flushing the inlets. The gage and chart recorder are maintained by DWR. The USGS Lakewood Field Office maintains the satellite equipment and phone interface for the USCOE.

REMARKS.--The primary record is fifteen minute data taken from satellite monitoring with chart backup. Daily maximum & minimum stages for the satellite record checked to within  $\pm 0.02$  with the chart. The record is complete and reliable. The record is considered good, except for February 2, 2007 due to possible ice Station maintained and record developed by Jana Ash.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

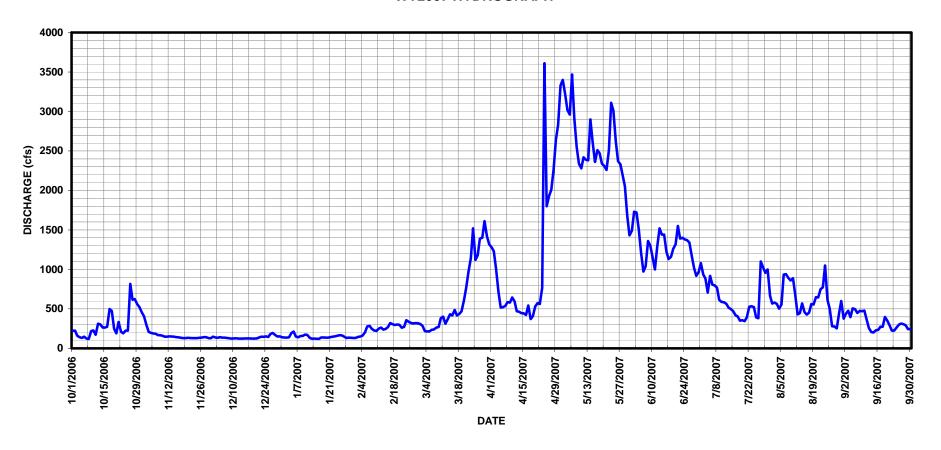
RATING TABLE.--PLADENCO33 USED FROM 01-OCT-2006 TO 30-SEPT-2007

				,	ME	EAN VALUE	ES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	405	148	137	131	309	1280	3330	1490	1080	568	377
2	222	302	137	136	146	287	1230	3400	1730	937	579	436
3	160	208	134	139	150	219	1010	3220	1720	882	563	477
4	141	196	141	195	162	215	718	3020	1510	705	503	395
5	132	188	136	213	202	215	518	2960	1220	917	556	506
6	148	187	136	150	278	236	522	3470	972	807	934	497
7	124	168	131	140	286	239	537	2920	1040	796	940	447
8	119	166	128	156	247	263	586	2550	1360	768	892	474
9	218	161	124	159	226	270	580	2340	1300	612	859	471
10	227	148	126	175	220	382	645	2280	1160	588	888	478
11	172	147	127	170	250	401	594	2420	1000	584	677	366
12	312	152	123	134	264	313	471	2390	1280	566	430	260
13	304	150	124	121	237	371	465	2380	1520	516	445	206
14	264	147	123	123	245	431	446	2900	1440	496	570	201
15	264	141	126	121	270	417	443	2600	1440	472	458	228
16	273	140	126	119	321	486	424	2360	1230	421	427	234
17	499	133	126	137	306	417	544	2510	1130	403	451	271
18	475	130	124	137	295	436	371	2470	1160	351	562	274
19	248	129	123	135	302	470	409	2340	1260	357	555	398
20	191	134	125	136	297	607	529	2310	1320	344	649	350
21	335	131	137	141	262	768	574	2260	1550	394	645	291
22	210	130	147	147	271	967	562	2510	1390	527	750	224
23	190	130	146	151	357	1140	767	3110	1400	532	772	224
24	225	129	151	161	336	1520	3610	3010	1380	523	1050	261
25	225	133	144	166	323	1120	1800	2620	1370	394	613	299
26	817	136	184	165	316	1180	1930	2370	1340	380	501	314
27	615	141	195	148	321	1390	2010	2330	1180	1100	279	305
28	624	142	169	131	318	1400	2270	2190	1020	1030	278	291
29	561	130	150	135		1610	2640	2050	918	956	254	245
30	523	127	151	134		1420	2830	1680	967	999	438	244
31	455		140	132		1320		1430		666	599	
TOTAL	9498	4861	4302	4544	7339	20819	31315	79730	38797	20103	18685	10044
MEAN	306	162	139	147	262	672	1044	2572	1293	648	603	335
AC-FT	18840	9640	8530	9010	14560	41290	62110	158100	76950	39870	37060	19920
MAX	817	405	195	213	357	1610	3610	3470	1730	1100	1050	506
MIN	119	127	123	119	131	215	371	1430	918	344	254	201
CAL YR	2006	TOTAL	83240	MEAN	228 MAX	139	00 MIN	80	AC-FT	165100		
WTR YR		TOTAL	250037		685 MAX	361			AC-FT	495900		

MAX DISCH: 7010 CFS AT 20:45 ON May. 14, 2007 GH 8.87 FT. SHIFT 0.19 FT. MAX GH: 8.87 FT. AT 20:45 ON May. 14, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06714000 SOUTH PLATTE RIVER AT DENVER CO WY2007 HYDROGRAPH



## FALL RIVER AT THE MOUTH NEAR IDAHO SPRINGS, CO

LOCATION.--Lat 39°45'20", long 105°33'24", in SE1/4, Sec. 28, T.3 S., R.73W., Clear Creek County. Gage is located on right bank of bridge wall, off of I-70 and the Fall River Road Exit (238) approximately 20 ft. past Fall River Road.

DRAINAGE AREA AND PERIOD OF RECORD. -- Not determined. Gage established July 2007 at present site and datum to monitor minimum stream flow reach and aid in the administration of water rights.

GAGE. -- Sutron Satlink II High Data Rate (HDR) Data collection platform (DCP) with Acububbler stage sensor in a 12" x 30" x 36" NEMA shelter. Outside staff gage (on REW of bridge wall) in the stream bed is the primary reference. A single orifice line in 2" pipe extends from the shelter past the stream staff and into the stream at about a 90° angle to the flow. Orifice terminates in a gravel packed plastic muffler that is half buried in the stream bed. The DCP provides the primary record. There is no backup recording device. The Accububbler was replaced on Sept. 12, 2007.

REMARKS.--Primary and only record is hourly satellite data. This was the first year for the gage and the period of record is from July 17 - September 30, 2007. Record is complete and reliable, except for Aug 19 thru Sept 12, 2007, when the bubbler was not functioning properly. During this period, the bubbler was producing erratic 15 minute values ranging from very low to high values. Record is good, except for the period from Aug 19 thru Sept 12, 2007, when the bubbler was not functioning properly. This period is considered estimated and fair. Station maintained and record developed by Steve Barrett.

RATING TABLE. -- FALIDACOO1 USED FROM 17-JUL-2007 TO 30-SEP-2007

## DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											19	31
2											21	31
3											21	30
4											21	31
5											19	31
6											20	30
7											20	28
8											19	28
9											18	26
10											18	26
11											17	25
12											17	26
13											17	28
14											17	26
15											16	26
16											16	25
17										28	15	26
18										29	16	23
19										29	16	16
20										26	14	15
21										25	18	13
22										26	27	11
23										24	27	9.9
24										24	25	12
25										25	23	15
26										24	22	14
27										29	25	18
28										28	31	18
29										24	31	18
30										22	31	18
31										20	31	
TOTAL										383	648	674.9
MEAN										25.5	20.9	22.5
AC-FT										760	1290	1340
MAX										29	31	31
MIN										20	14	9.9

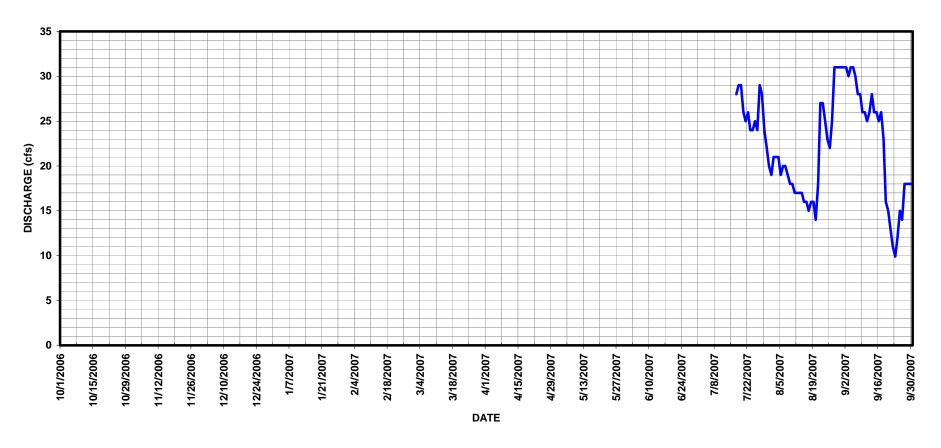
CAL YR 2006 No record for calendar year 2006

9.9 AC-FT WTR YR 2007 TOTAL 1705.9 MEAN 22.4 MAX 31 MIN 3380 (PARTIAL YEAR RECORD)

MAX DISCH: 67 CFS AT 17:15 ON Jul. 27, 2007 GH 1.71 FT. SHIFT 0 FT. MAX GH: 1.71 FT. AT 17:15 ON Jul. 27, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# FALL RIVER AT THE MOUTH NEAR IDAHO SPRINGS CO WY2007 HYDROGRAPH



## 06720000 CLEAR CREEK AT DERBY, CO

LOCATION.--Lat 39°49'39", long 104°57'21", in SW4SW4 sec. 36, T.2 S., R.68 W., Adams County, Hydrologic Unit 10190004, on right bank 975 ft downstream from York Street bridge, 0.5 mi upstream from mouth, and 2.5 mi west of Derby.

DRAINAGE AREA AND PERIOD OF RECORD. --575 mi<sup>2</sup>; April-Nov. 1914, 1927 to present.

GAGE.--Graphic water-stage recorder with satellite monitoring DCP with digital shaft encoder and Telemark in a 60 inch corrugated metal shelter and well. Station at this datum since June 26, 1992. Primary reference is by electric drop tape.

REMARKS.--The primary record is hourly satellite data and mean daily gage heights from the chart. Daily maximum and minimum stages for the satellite record checked to within ± 0.02 with the chart. The record is complete and reliable, except for the following periods: December 4-6, 2006, Feb 28, 2007, due to ice affecting the stage-discharge relationship; Jan. 25, Feb 3, 2007, due to floats frozen in ice in the well; and January 12-24, 26-31, February 1-2, 4-6, 2007, due to possible ice effect. The record is good, except for December 4-6, 2006, January 25, February 3, 28, 2007, which are estimated and poor due to ice; and January 12-24, 26-31, February 1-2, 4-6, 2007, which are fair due to indeterminate ice effects. Station maintained and record developed by Steve Barrett.

RATING TABLE.--CLEDERCO34 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCH	ARGE, IN C	FS, WATER M	YEAR OCTO		TO SEPTE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	27	40	26	40	32	81	391	701	404	15	6.3
2	5.4	25	35	25	37	27	68	435	667	377	23	14
3	9.5	23	21	26	36	25	23	350	752	328	73	12
4	15	24	20	46	36	24	45	354	754	301	156	9.6
5	6.3	20	22	45	47	26	41	455	794	300	127	12
6	5.3	16	22	32	125	29	78	658	934	287	115	14
7	4.6	14	21	32	111	25	75	385	888	235	93	14
8	4.8	13	20	37	80	29	80	306	800	261	128	5.8
9	24	14			53	28	78	279	759	198	84	4.5
10	45	11			43	39	79	283	785	167	65	7.9
11	12	6.6	19		47	37	62	317	839	157	34	8.0
12	10	14				28	53	408	972	140	28	6.0
13	6.4	15			64	30	57	482	948	135	20	6.2
14	6.7	13			50	29	37	665	858	95	9.7	5.9
15	14	17			49	32	38	808	899	82	48	5.9
16	18	18				53	34	839	966	60	43	14
17	45	16			37	97	149	742	995	39	8.4	11
18	69	13			33	69	65	695	999	40	15	36
19	33	11				97	55	776		39	13	21
20	24	12			32	91	48	926		63	20	9.0
21	80	10			29	101	52	1010		39	7.7	6.6
22	40	9.3			28	111	62	1060			5.9	5.9
23	22	7.8			28	131		963	631		7.3	5.8
24	16	6.6			26	319	1000	816	584		201	38
25	8.3	6.6				174	477	635	551		32	57
26	238	6.7			25	144	154	564			12	15
27	100	8.5			27	126	133	549			7.5	16
28 29	70 47	16 24			28	127 198	110 124	656	528 482	245 85	32 20	20
30	39	27				198	124	1100 908	482	50	12	15 11
31	32					108	196	753	440	31	11	
31	32		30	30		100		133		31	11	
TOTAL	1055.6	445.1	779	824.3	1270	2528	3620	19568	22694	4463.1	1466.5	413.4
MEAN	34.1	14.8			45.4	81.5	121	631	756	144	47.3	13.8
AC-FT	2090	883		1630	2520	5010	7180	38810	45010	8850	2910	820
MAX	238	27		46	125	319	1000	1100	999	404	201	57
MIN	4.6	6.6	14	8.4	25	24	23	279	440	7.9	5.9	4.5
CAL YR	2006				54.6 MAX		36 MIN		AC-FT	39540		

MAX DISCH: 2110 CFS AT 15:45 ON May. 29, 2007 GH 3.92 FT. SHIFT -0.16 FT. MAX GH: 3.92 FT. AT 15:45 ON May. 29, 2007

162 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

59127 MEAN

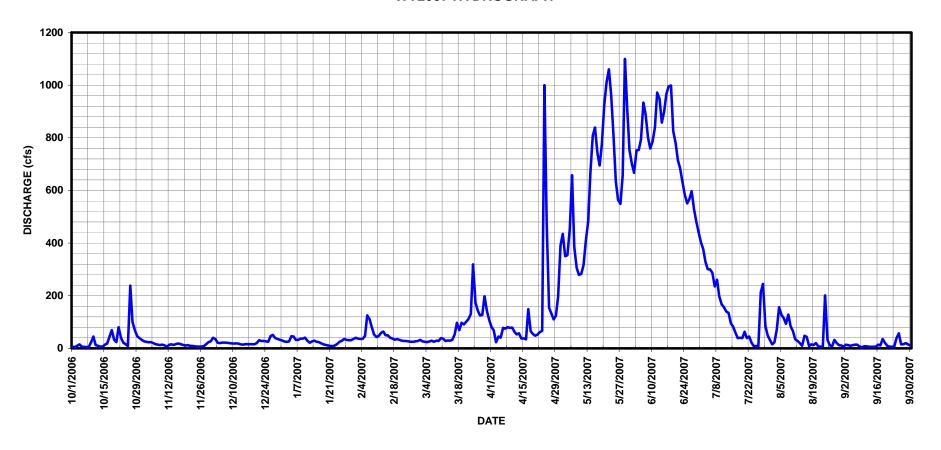
WTR YR 2007

TOTAL

1100 MIN

4.5 AC-FT

# 06720000 CLEAR CREEK AT DERBY CO WY2007 HYDROGRAPH



## 06720500 SOUTH PLATTE RIVER AT HENDERSON, CO

LOCATION --Lat 39°55'19", long 104°52'00", in SE½NE¼ sec. 34, T.1 S., R,67 W., Adams County, Hydrologic Unit 10190003, on right bank 500 ft upstream from bridge on State Highway 22 and 0.2 mi northwest of Henderson.

PERIOD OF RECORD AND DRAINAGE AREA.--4,768 mi<sup>2</sup>. May 1926 to current year. Monthly data only prior to 1933. Periodic water quality data available starting in 1955.

GAGE.--Water-stage recorder with satellite telemetry, shaft encoder and phone modem in a 42-inch metal pipe shelter with electric drop tape and outside wire weight as additional reference. Water quality instrumentation installed by other agencies. Datum of gage, formerly 4999.12 ft. MSL, (NAVD 1929), revised by survey to 5001.25 ft MSL (NAVD 1988).

REMARKS.--The primary record is fifteen minute data taken from satellite monitoring with chart backup. The encoder remained in good calibration. The gage was visited 24 times and the encoder required no adjustments. The gage height record is complete. The record is complete and reliable. The new control has created a sand bar moving in the direction of the gage that has been causing the inlets to become buried. The extended pipe inlets are expected to mitigate this problem. Record is rated as good. Station maintained and record developed by Jana Ash.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- PLAHENCO33 USED FROM 01-OCT-2006 TO 30-SEPT-2007

			DISCHA	RGE, IN CI	S, WAIER I	EAN VALUE		IO SEPIE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	314	235	264	250	713	1410	3210	1980	1200	298	440
2	182	292	235	258	243	667	1390	3360	2180	1010	510	321
3	185	278	218	263	255	573	1160	3040	2260	915	656	515
4	201	272	215	314	269	540	789	2850	2070	711	471	352
5 6	186	336	269	404	303	550	577	2990	1750		599	346
	180	421	225	329	436	560	596	3900	1690	767	1220	396
7	167	404	209	309	461	471	704	3170	1940		736	289
8	188	353	209	325	430	274	724	2650	1940		719	246
9	278	339	203	367	413	258	731	2390	1560	708	584	235
10	461	323	201	358	393	252	717	2250	1580		563	281
11	209	317	210	308	417	450	933	2320	1540	806	512	244
12	189	323	209	270	448	316	774	2340	1750		375	195
13	172	349	202	258	406	299	701	2430	2250		378	195
14	161	325	241	255	323	273	651	2920	1820	455	410	199
15	159	319	354	265	320	266	455	4140	1770		587	200
16	169	305	386	253	311	294	421	3060	1690	405	613	199
17	228	303	393	263	325	339	680	3040	1580	412	375	228
18	479	294	401	260	345	302	415	2960	1680	392	514	251
19	278	298	401	256	374	325	356	2870	1620	427	485	246
20	247	280	410	260	422	401	356	2970	1610	517	589	234
21	358	191	394	251	382	558	403	3070	1860	481	443	218
22	286	184	417	245	449	1090	420	3490	1650		482	204
23	246	191	358	247	643	1310	472	3960	1570		568	198
24	215	167	316	259	707	1770	4300	4410	1500	582	1430	231
25	207	178	248	287	719	1400	3870	3480	1460		511	298
26	866	181	276	354	705	1210	2570	2930	1450		297	215
27	801	190	354	367	687	1430	2290	2790	1360		245	206
28	628	193	321	346	716	1500	2320	2790	1180		254	208
29	460	209		310		1820	2430	3300	1050			199
30	374			256		1680	2610	2840	1020		202	
31	333		282	256		1500		2160		376	422	
TOTAL	9259	8346		9017	12152	23391	36225	94080	50360		16324	7780
MEAN	299		289			755		3035	1679		527	259
AC-FT	18370	16550		17890	24100	46400	71850	186600	99890		32380	15430
MAX	866	421	417	404 245	719 243	1820	4300	4410	2260 1020	1860 376	1430	515
MIN	159	167	201	245	243	252	356	2160	1020	376	232	191

MAX DISCH: 8120 CFS AT 00:00 ON Apr. 25, 2007 GH 9.49 FT. SHIFT 0.07 FT. MAX GH: 9.49 FT. AT 00:00 ON Apr. 25, 2007

337 MAX

815 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

122903 MEAN

297337 MEAN

CAL YR 2006

WTR YR 2007

TOTAL

TOTAL

2560 MIN

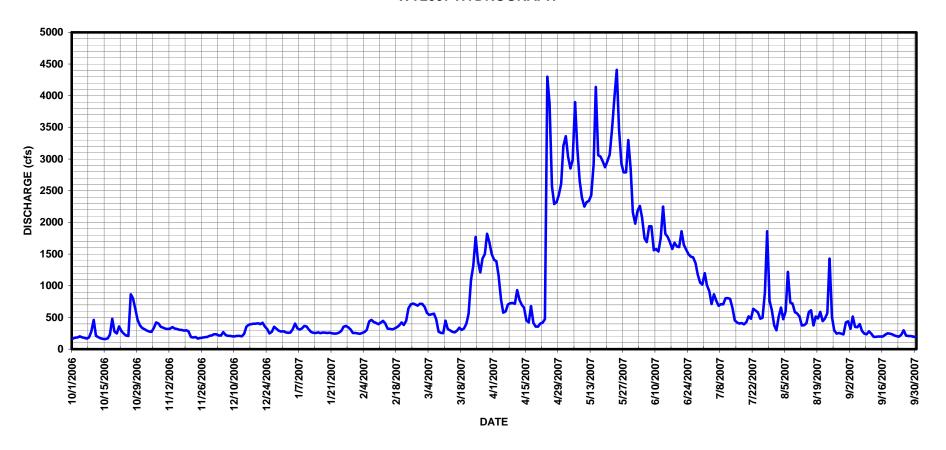
4410 MIN

97 AC-FT

159 AC-FT

243780

# 06720500 SOUTH PLATTE RIVER AT HENDERSON CO WY2007 HYDROGRAPH



## MIDDLE ST. VRAIN CREEK NR. PEACEFUL VALLEY, CO

LOCATION.--Lat 40 07' 55", long 105 31' 00", NE1/4 NW1/4 Sec. 24, T.2 N., R.73 W.

PERIOD OF RECORD AND DRAINAGE AREA.--Gage established on May 14, 1998 by State of Colorado, Division of Water Resources personnel. The record at this gage is partial year record only.

GAGE.--Graphic water-stage recorder and satellite monitoring DCP with shaft encoder in 48" diameter metal pipe shelter and well. DCP is the primary record with chart as a backup. The primary reference is a metal drop tape located in the shelter. Gage is not equipped with a supplemental outside staff gage.

REMARKS.—The primary record is hourly averages of 15-minute DCP data with chart as backup. The record is complete and reliable, except for the following periods: October 17-19; 21-23, 25-28, 2006, when the gage was affected by ice; October 30, 2006 to April 23, 2007, when the gage was off for winter. No gage-height information is available. Missing data from the primary data set were filled in with graphical chart record without loss of accuracy on the following days: August 1, 24, 25, 28, September 4, 5, 8, 18, 2007. The record is good, except as follows: October 17-19, 21-23, 25-28, 2006, when the stage-discharge relationship was affected by ice, record is estimated and poor; October 29, to April 23, 2007, gage closed for winter, no record is available; April 23, 2007 is estimated and fair because it is based on partial day record. Partial year record only, period of record for the 2007 Water Year is October 1- 30, 2006 and April 23 to September 30, 2007. Station maintained and record developed by Russell Stroud.

RATING TABLE. -- MIDSTECO04 USED FROM 01-OCT-2006 TO 30-SEPT-2007

DISCH	ARGE, IN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007
			I	MEAN V	<i>J</i> ALUES				

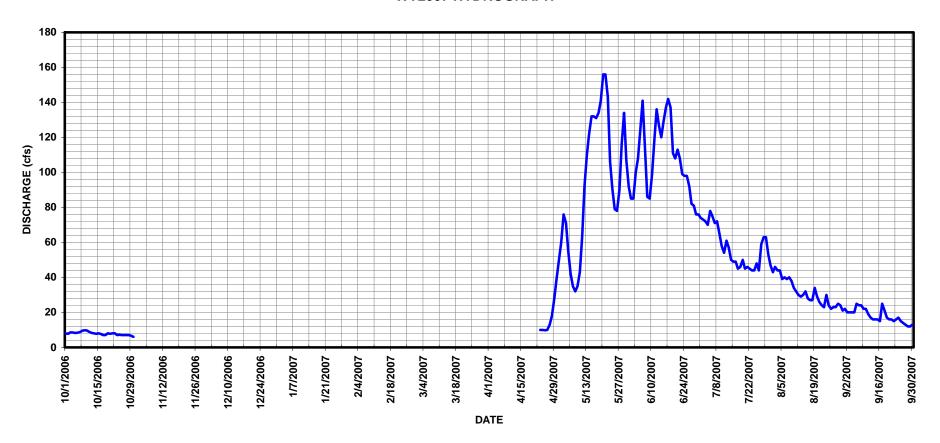
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9							50	85	74	43	22
2	7.9							60	85	73	46	20
3	8.6							76	100	72	44	20
4	8.5							71	108	70	44	20
5	8.2							55	125	78	39	20
6	8.4							42	141	75	40	25
7	8.7							35	113	71	39	24
8	9.5							32	86	72	40	24
9	9.8							35	85	65	38	22
10	9.7							43	99	58	34	22
11	8.9							64	118	54	32	19
12	8.3							92	136	61	30	17
13	8.0							110	127	57	29	16
14	7.8							122	120	50	30	16
15	8.0							132	129	49	32	16
16	7.7							132	137	49	28	15
17	7.0							131	142	45	27	25
18	7.0							134	137	46	27	21
19	8.0							141	111	50	34	17
20	7.8							156	108	45	29	16
21	8.0							156	113	46	26	16
22	8.0							143	108	45	24	15
23	7.0						10	106	99	44	23	16
24	7.2						10	90	98	44	30	17
25	7.0						9.8	79	98	48	24	15
26	7.0						10	78	92	44	22	14
27	7.0						13	90	82	59	23	13
28	7.0						18	116	81	63	23	12
29	6.7						28	134	76	63	25	12
30	6.0						39	107	76	53	24	13
31								92		47	21	
31								32		47	21	
TOTAL	236.6						137.8	2904	3215	1770	970	540
MEAN	7.89						17.2	93.7	107	57.1	31.3	18.0
AC-FT	469						273	5760	6380	3510	1920	1070
MAX	9.8						39	156	142	78	46	25
MIN	6.0						9.8	32	76	44	21	12
TITIN	0.0						٥.٠	52	, 0		2 ±	14
CAT VD	2006	TOTAT	0003 5 ME	י זו גי	23 U MVA	1 0	3 MTN	6	\C_ET	19640 (D7	ים ארדער ארי	AD DECODDI

CAL YR 2006 TOTAL 9903.5 MEAN 53.0 MAX 193 MIN 6 AC-FT 19640 (PARTIAL YEAR RECORD)
WTR YR 2007 TOTAL 9773.4 MEAN 51.2 MAX 156 MIN 6 AC-FT 19390 (PARTIAL YEAR RECORD)

MAX DISCH: 192 CFS AT 21:45 ON May. 21, 2007 GH 2.86 FT. SHIFT 0.01 FT. MAX GH: 2.86 FT. AT 21:45 ON May. 21, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# MIDDLE ST. VRAIN CREEK NR. PEACEFUL VALLEY CO WY2007 HYDROGRAPH



## SOUTH ST. VRAIN CREEK NEAR WARD, CO

LOCATION. -- Lat 40°05'27", long 105°30'50"

**DRAINAGE AREA AND PERIOD OF RECORD.** --14.4 mi<sup>2</sup>; 1925-27,28-31, 54-73, 1992 to present.

GAGE.--Graphic water-stage recorder and a high data rate data collection platform (DCP) with shaft encoder in 42-inch diameter corrugated metal pipe shelter and well. The primary reference gage is a brass nut reference point (RP) and metal drop tape located in the shelter. There is no supplementary outside staff gage equipped at this gage.

REMARKS.—The primary record is hourly averages of 15-minute DCP data with chart as backup. Record is complete and reliable, except for the following periods: October 10, 11, 17-23, 2006 with the stage-discharge relationship was affected by ice; October 26-30, 2006 when the gage was ice affected and the stilling well was frozen; October 30, 2006 to May 17, 2007 the gage was off for winter, no gage-height information available. Record is good, except for periods of no gage height and ice affected record, which are poor; discharge for May 17 is estimated and poor since it is based on partial day record. Flows on July 27-29, August 12-13, and August 27-September 7, 2007 are considered fair due to unexplained variations in the discharges between this gage and the Left Hand Ditch Diversion (LEFTHDCO) record during periods when closer agreement was expected. Partial year record only, period of record for the 2007 Water Year is October 1- 26, 2006 and May 17- September 30, 2007. Station maintained and record developed by Russell Stroud.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- SSVWARCO11 USED FROM 01-OCT-2006 TO 30-SEPT-2007

					ME	AN VALUES	5					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5								75	73	38	27
2	6.1								68	73	36	25
3	6.5								89	70	36	25
4	6.7								96	72	41	24
5	6.5								109	78	39	20
6	6.6								128	72	38	22
7	6.7								104	63	36	22
8	6.9								76	73	36	20
9	7.4								83	61	31	18
10	7.5								96	53	29	16
11	6.0								112	49	27	11
12	6.5								137	49	26	10
13	5.8								136	47	26	9.0
14	6.2								122	42	44	8.5
15	6.8								131	41	49	8.8
16	6.9								155	40	41	8.8
17	5.5							93	170	39	39	13
18	6.5							92	165	39	39	13
19	7.0							103	127	42	45	11
20	7.5							120	115	40	39	10
21	7.0							113	116	39	35	9.3
22	7.0							110	117	42	34	7.9
23	7.5							78	109	40	34	8.4
24	7.4							62	108	38	39	10
25	6.6							52	105	37	34	10
26								53	102	38	30	9.4
27								61	90	76	31	8.2
28								94	84	91	32	7.9
29								114	76	72	31	7.9
30								95	75	54	30	9.0
31								82		42	27	
TOTAL	167.6							1322	3276	1685	1092	410.1
MEAN	6.70							88.1	109	54.4	35.2	13.7
AC-FT	332							2620	6500	3340	2170	813
MAX	7.5							120	170	91	49	27

MAX DISCH: 193 CFS AT 23:00 ON Jun. 17, 2007 GH 2.8 FT. SHIFT 0.03 FT. MAX GH: 2.8 FT. AT 23:00 ON Jun. 17, 2007

45.9 MAX

49.1 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

8345.3 MEAN

7952.7 MEAN

MIN

CAL YR 2006

WTR YR 2007

TOTAL

TOTAL

198 MIN

MIN

170

52

5.5 AC-FT

5.5 AC-FT

37

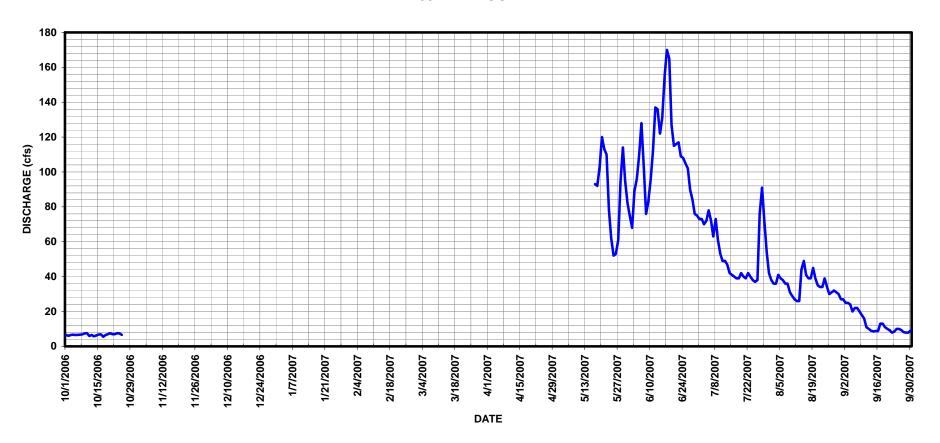
26

16550 (PARTIAL YEAR RECORD)

15770 (PARTIAL YEAR RECORD)

7.9

# SOUTH ST. VRAIN CREEK NEAR WARD CO WY2007 HYDROGRAPH



## LEFTHAND DIVERSION AT SO. ST. VRAIN CREEK NEAR WARD, CO

LOCATION.--Lat 40°05'29", long 105°30'31", the gage is located ½ mile downstream from gage on S. St. Vrain Creek off Highway 72.

PERIOD OF RECORD AND DRAINAGE AREA.--Established station on May 21, 1992 at request of Water Commissioner for administration of water rights in District 5, Div. 1. The gage is located one-quarter mile downstream from gage on South Saint Vrain Creek off Highway 72. This station is operated as a partial year record station usually from May to October.

GAGE.--Steven's type A continuous graphical water-stage recorder, satellite monitoring data collection platform (DCP) and incremental shaft encoder in a 42-inch corrugated metal pipe shelter with a 42-inch concrete well. The well is connected to the channel with two two-inch polyvinyl conduit (PVC) inlets. The PVC inlets are equipped with ball valves, street keys and flushing risers. An adjustable brass nut reference point with metal drop tape is the base gage. No supplemental staff is present.

REMARKS.--The primary record is hourly averages of 15-minute DCP data with chart as backup. Record is complete and reliable, except for the following periods: October 10, 11, 17-23, 2006 with the stage-discharge relationship was affected by ice; October 26-30, 2006 when the gage was ice affected and the stilling well was frozen; October 30, 2006 to May 18, 2007 the gage was off for winter, no gage-height information available. Record is good, except for periods of no gage height and ice affected record, which are poor; discharge for May 18 is estimated and poor since it is based on partial day record. Flows on July 27-29, August 12-13, and August 27-September 7, 2007 are considered fair due to unexplained variations in the discharges between this gage and the South St. Vrain nr. Ward (SSVWARCO) record during periods when closer agreement was expected. Partial year record only, period of record for the WY2007 is October 1-26, 2006 and May 18-September 30, 2007. Station maintained and record developed by Russell Stroud.

RATING TABLE. -- LEFTHDC003 USED FROM 01-OCT-2006 TO 30-SEPT-2007

DEC

---

\_\_\_

\_\_\_

---

---

\_\_\_

---

\_\_\_

\_\_\_

JAN

---

\_\_\_

---

---

---

\_\_\_

---

\_\_\_

FEB

---

\_\_\_

---

---

---

\_\_\_

---

---

DAY

16

17

18

19

20

21

22

23

25

27

2.8

OCT

7.1

5.5

6.5

7.0

7.5

7.0

7.0

7.5

7.3

6.5

NOV

---

\_\_\_

---

---

---

\_\_\_

---

---

\_\_\_

1	6.8	 	 	 	 68	66	36	25
2	6.5	 	 	 	 62	66	34	23
3	6.7	 	 	 	 77	64	34	23
4	7.0	 	 	 	 85	66	40	22
5	6.7	 	 	 	 97	70	37	18
6	6.8	 	 	 	 109	67	36	20
7	7.0	 	 	 	 92	61	34	20
8	7.2	 	 	 	 56	67	34	19
9	7.6	 	 	 	 55	60	30	18
10	7.5	 	 	 	 83	54	28	15
11	6.0	 	 	 	 99	50	25	12
12	6.8	 	 	 	 109	50	24	10
13	6.2	 	 	 	 108	49	24	9.0
14	6.4	 	 	 	 104	44	40	8.4
15	7.0	 	 	 	 105	43	47	8.8

---

\_\_\_

---

---

---

\_\_\_

---

---

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

MAR

APR

---

\_\_\_

\_\_\_

---

---

\_\_\_

---

---

MAY

---

62

53

63

80

78

72

54 55

61

92

JUN

106

104

104

100

98

97

97

93

92

78

7.3

JUL

41

40

41

44

41

37

41

38

36

35

36

69

82

AUG

40

37

38

44

38

35

33

32

33

2.8

30

SEP

8.8

1.3

13

11

10

9.3

7.9

8.4

10

10

9.3

8.2

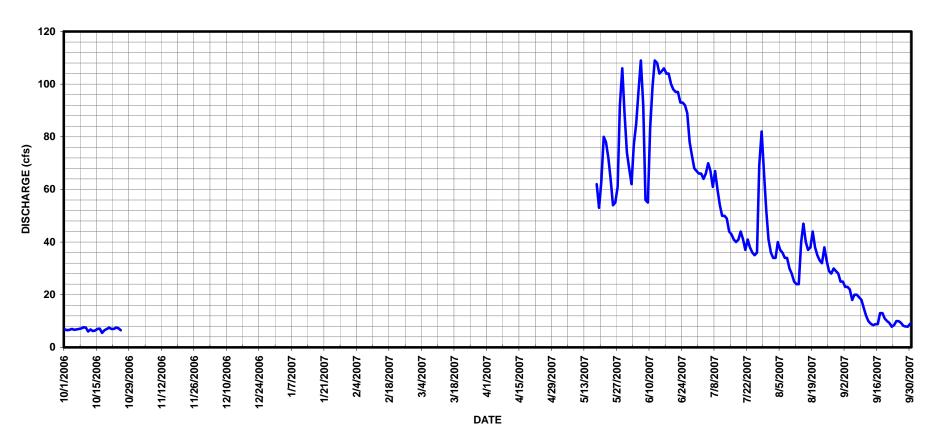
7.9

29								106	68	67	29	7.9	
30								89	67	52	28	9.0	
31								74		41	25		
TOTAL	171.1							1003	2668	1618	1040	394.9	
MEAN	6.84							71.6	88.9	52.2	33.5	13.2	
AC-FT	339							1990	5290	3210	2060	783	
MAX	7.6							106	109	82	47	25	
MIN	5.5							53	55	35	24	7.9	
CAL YR WTR YR	2006 2007	TOTAL TOTAL	8837.1 ME 6895 ME	AN AN	45.8 MAX 42.8 MAX	152 109	MIN MIN	5.5 5.5	AC-FT AC-FT	16540 13680	*	YEAR RECORD) YEAR RECORD)	

MAX DISCH: 115 CFS AT 22:00 ON Jun. 12, 2007 GH 2.07 FT. SHIFT 0.03 FT. MAX GH: 2.07 FT. AT 22:00 ON Jun. 12, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# LEFTHAND DIVERSION AT SO. ST. VRAIN CREEK NEAR WARD CO WY2007 HYDROGRAPH



## 06724000 ST. VRAIN CREEK AT LYONS, CO

LOCATION.--Lat 40°13'05", long 105°15'34", in NW4NW4 sec. 20, T.3 N,, R.70 W., Boulder County, Hydrologic Unit 10190005, on left bank 75 ft southwest of U.S. Highway 36 (State Highways 7 and 66) at southeast edge of Lyons, 400 ft upstream from St. Vrain Supply Canal, and 0.4 mi downstream from confluence of North and South St. Vrain Creeks.

DRAINAGE AREA AND PERIOD OF RECORD.--212 mi<sup>2</sup>. Aug. 1887 to Sep. 1891, June 1895 to current year. Monthly only data for some periods. Water quality data available from Oct. 1977 to Feb. 1981. On March 23, 2003, the gage was moved approximately 0.2 mi upstream. In the new location, the gage is above the Supply Ditch diversion, whereas the old location was below this diversion.

GAGE.--Graphic water stage recorder and satellite monitoring DCP and shaft encoder in a 6' by 6' wooden shelter with 42-inch concrete stilling well upstream of a low head concrete diversion dam. Primary reference is an electric drop tape with an outside chain gage as backup.

REMARKS.--Primary record is hourly averages of 15-minute data taken from satellite monitoring with chart back up. The record is complete and reliable, except for the following periods: October 31, November 1-3, 11, 13, 15, 19-21, 27-30, December 1, 2006, when the stilling well or inlets were frozen; March 2-4, 2007, when the stage-discharge relationship was affected by ice; December 1, 2006 to March 2, 2007, when the station was closed for winter. Chart record was used to fill in missing portions of the primary record without loss of accuracy on the following days: October 26, 2006; April 1, August 24, 2007. The record is good, except for periods of no gage height or ice affected record, which are estimated and poor. Station maintained and record developed by Russell Stroud.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
MEAN VALUES

MAR

APR

MAY

JUN

JUL

AUG

SEP

RATING TABLE. -- SVCLYOCO24 USED FROM 01-OCT-2006 TO 30-SEPT-2007

JAN

FEB

DEC

ОСТ

MOM

DAY

TOTAL

MEAN

MAX

MTN

AC-FT

CAL YR 2006

WTR YR 2007

837

27.0

1660

39

425.0

14.2

843

22

9.0

TOTAL

TOTAL

358.0

11.5

710

15

31002 MEAN

36323 MEAN

9.0

DIII	001	1101	DEC	01111	1 111	111111	211.10	11111	0011	001	1100	OLL
1	20	16	10	12	9.0	35	122	231	260	211	123	40
2	27	20	11	14	9.0	34	113	235	242	221	123	40
3	31	20	12	15	10	34	121	247	263	218	134	39
4	31	22	12	16	11	32	133	240	265	212	126	39
5	32	15	13	13	11	31	142	222	248	208	113	38
6	32	12	13	11	12	33	145	191	258	212	109	45
7	32	14	13	12	14	34	139	167	249	199	104	51
8	33	20	14	13	16	34	139	169	264	201	118	49
9	37	19	14	16	16	35	134	188	420	191	106	46
10	39	20	12	16	14	36	132	211	231	175	100	47
11	37	15	12	13	13	37	127	235	303	165	90	45
12	30	13	11	10	13	40	132	309	393	159	83	38
13	28	10	12	9.0	10	46	156	350	428	166	79	34
14	27	15	14	8.0	8.0	53	152	351	384	150	76	31
15	28	10	15	8.0	8.0	59	152	314	393	160	87	31
16	22	13	12	9.0	9.0	56	153	329	437	152	83	29
17	20	15	11	11	17	59	138	354	451	144	73	33
18	29	9.0	10	11	20	65	113	364	483	135	66	53
19	21	10	10	10	24	69	109	406	381	143	84	39
20	22	12	10	11	26	73	90	435	335	142	78	36
21	29	14	9.0	11	27	74	92	432	339	134	64	32
22	25	14	9.0	10	27	73	91	439	342	134	56	27
23	20	15	10	11	27	77	93	369	315	128	50	26
24	17	15	11	12	28	119	111	341	308	128	57	45
25	15	13	11	13	29	135	133	307	305	126	52	40
26	32	12	11	14	30	136	160	276	293	130	47	43
27	27	12	12	13	30	128	183	261	262	166	44	34
28	32	10	12	10	31	123	202	281	252	178	47	30
29	25	10	10	11		117	211	334	234	169	51	25
30	23	10	10	11		114	225	328	221	164	46	26
31	14		12	11		128		289		150	42	

2119

68.4

4200

136

4143

138

8220

225

618 MIN

483 MIN

9205

297

439

167

18260

9559

319

483

18960

9 AC-FT

8 AC-FT

5171

167

221

10260

61490

72050

2511

81.0

4980

134

42

1131

2240

53

25

MAX DISCH: 525 CFS AT 10:30 ON Jun. 18, 2007 GH 2.65 FT. SHIFT 0.06 FT. MAX GH: 2.65 FT. AT 10:30 ON Jun. 18, 2007

365.0

11.8

724

16

8.0

499 N

17.8

990

8.0

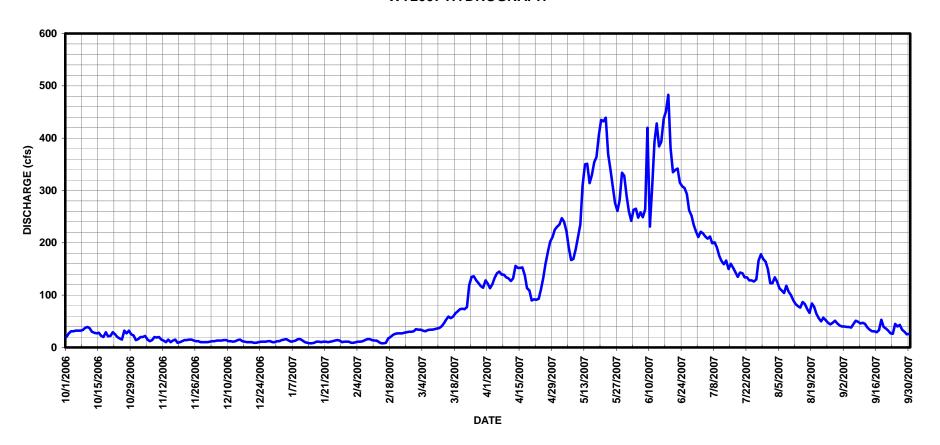
84.9 MAX

99.5 MAX

31

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06724000 ST. VRAIN CREEK AT LYONS CO WY2007 HYDROGRAPH



## 06725500 MIDDLE BOULDER CREEK AT NEDERLAND, CO

LOCATION.--Lat 39°57'42", long 105°30'16", in NE4SE4 sec. 13, T.1 S., R.73 W., Boulder County, Hydrologic Unit 10190005, on left bank at Nederland just downstream from North Beaver Creek at inlet to Barker Reservoir.

DRAINAGE AREA AND PERIOD OF RECORD. -- 36.2 mi<sup>2</sup>; June 1907 to present.

GAGE. -- Water-stage recorder and data collection platform in wooden shelter with concrete well at a compound sharp-crested weir. DCP is the primary record with chart recorder as backup.

REMARKS.--Record is complete and reliable, except for the following periods: November 26-30, December 1-31, 2006, January 1-31, February 1-28, March 1-12, 2007, when the stage-discharge relation was affected by ice on the weir and inlets freezing. The record is good, except during periods of ice affected record, which are estimated and poor. Flows above 200 cfs (GH = 2.14 ft.) are considered fair due to lack of definition of the stage-shift relationships at this gage height. The following days are considered fair: May 12-23 & 27-30, 2007, and June 4-6, 10-25, 2007. In the summer, tree limbs caught on the weir occasionally affect gage heights. Any debris or ice on the control would normally be cleared weekly by the City of Boulder operator, so any datum corrections for debris are only normally applied for short periods. Station maintained by City of Boulder and record developed by Steve Barrett.

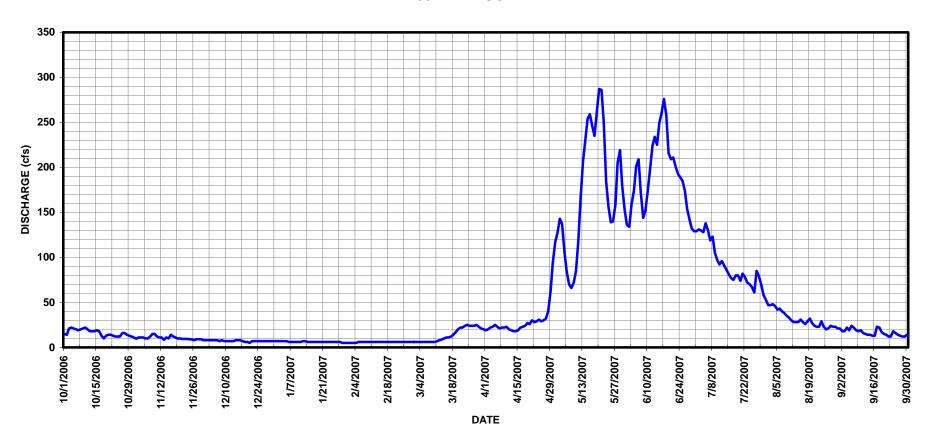
RATING TABLE. -- BOCMIDCO07 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE	, IN CFS,		YEAR OCTO		TO SEPTEMB	ER 200	7		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	9.6	8.0	7.0	5.0	6.0	19	117	136	129	47	21
2	14	11	8.0	7.0	5.0	6.0	20	127	134	131	47	18
3	21	11	8.0	7.0	5.0	6.0	22	143	159	130	48	18
4	22	11	8.0	7.0	5.0	6.0	23	137	174	128	46	22
5	21	10	8.0	7.0	6.0	6.0	25	106	201	138	42	19
6	20	10	8.0	6.0	6.0	6.0	23	84	209	130	43	24
7	19	12	7.0	6.0	6.0	6.0	21	70	172	119	40	22
8	20	15	8.0	6.0	6.0	6.0	22	66	144	123	38	19
9	21	15	7.0	6.0	6.0	6.0	22	72	152	105	35	18
10	22	12	7.0	6.0	6.0	6.0	23	85	175	97	33	19
11	20	11	7.0	6.0	6.0	7.0	20	118	198	92	30	16
12	18	11	7.0	7.0	6.0	8.0	19	165	224	96	28	15
13	18	8.5	7.0	7.0	6.0	8.7	18	206	234	91	28	14
14	18	11	8.0	6.0	6.0	10	18	229	225	86	28	14
15	19	10	8.0	6.0	6.0	11	19	254	249	81	31	13
16	18	14	8.0	6.0	6.0	11	22	259	261	77	28	13
17	13	12	7.0	6.0	6.0	12	23	246	276	75	26	23
18	10	11	6.0	6.0	6.0	14	24	235	258	80	29	22
19 20	13 14	9.7 10	6.0 5.0	6.0	6.0	17 20	27 26	262 287	216 209	80 74	32 27	17 15
20	14	9.5	7.0	6.0 6.0	6.0 6.0	20	30	286	209	82	24	13
22	13	9.5	7.0	6.0	6.0	22	28	250	201	82 78	24	12
23	12	9.4	7.0	6.0	6.0	24	20 29	184	193	76 72	23	12
24	12	9.0	7.0	6.0	6.0	25	31	157	189	70	29	18
25	12	8.8	7.0	6.0	6.0	24	29	139	185	67	23	16
26	16	8.0	7.0	6.0	6.0	24	30	140	174	61	20	14
27	16	9.0	7.0	6.0	6.0	24	32	159	154	85	21	13
28	14	9.0	7.0	6.0	6.0	25	40	205	142	79	24	12
29	13	9.0	7.0	5.0		23	62	219	132	70	23	12
30	12	8.0	7.0	5.0		21	94	179	129	58	23	14
31	11		7.0	5.0		20		153		53	21	
TOTAL	501	313.9	223.0	190.0	164.0	432.7	841	5339	5716	2837	960	499
MEAN	16.2	10.5	7.19	6.13	5.86	14.0	28.0	172	191	91.5	31.0	16.6
AC-FT	994	623	442	377	325	858	1670	10590	11340	5630	1900	990
MAX	22	15	8.0	7.0	6.0	25	94	287	276	138	48	24
MIN	10	8.0	5.0	5.0	5.0	6.0	18	66	129	53	20	12
CAL YR	2006		8107 MEAN	49.6		317	MIN	5 AC-		35910		
WTR YR	2007	TOTAL 1	.8017 MEAN	49.4	MAX	287	MIN	5 AC-	FT	35740		

MAX DISCH: 346 CFS AT 22:00 ON May. 20, 2007 GH 2.71 FT. SHIFT 0.01 FT. MAX GH: 2.71 FT. AT 22:00 ON May. 20, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06725500 MIDDLE BOULDER CREEK AT NEDERLAND CO WY2007 HYDROGRAPH



## 06727000 BOULDER CREEK NEAR ORODELL, CO

LOCATION.--Lat 40°00'23", long 105°19'50", in NE4sW4 sec. 34, T.1 N., R.71 W., Boulder County, Hydrologic Unit 10190005, on left bank along State Highway 119, 0.7 mi southwest of old Orodell, 1.1 mi upstream from Fourmile Creek, and 2.9 mi southwest of courthouse in Boulder.

DRAINAGE AREA AND PERIOD OF RECORD. -- 102 mi<sup>2</sup>; Oct. 1906 to present.

GAGE. -- Stevens A35 graphic water-stage recorder and Sutron 8210 DCP with shaft encoder in a 6 ft by 6 ft exposed aggregate concrete shelter with a 54-inch corrugated metal well. The primary reference is a tape down from RP. There is an outside staff gage across the stream that reads approximately 1 foot lower than gage datum. The data collection platform (DCP) provides the primary record. The station now includes a pressure transducer installed by Urban Drainage and Flood Control District.

REMARKS.--Primary record is hourly averages of 15-minute satellite data, with graphic chart as backup. Record is complete and reliable, except for the winter period, December 5, 2006 through March 9, 2007, when the station was shut down. Record is good, except for the period December 5, 2006 to March 9, 2007, which is estimated and poor due to ice. Station maintained and record developed by Steve Barrett.

RATING TABLE. -- BOCOROCO14 USED FROM 01-OCT-2006 TO 30-SEPT-2007

DAY         OCT         NOV         DEC         JAN         FEB         MAR         APR         MAY         JUN         JUL         AU           1         24         22         18         17         17         22         36         82         201         157         7           2         24         23         19         16         16         23         35         80         192         157         7           3         23         25         21         18         17         21         35         74         213         156         7           4         23         26         22         20         17         22         35         72         233         159         5           5         22         25         22         20         18         22         36         68         258         172         7           6         20         23         20         19         19         21         35         61         298         173         8           7         19         25         20         19         20         22         40         57         262 <t></t>	
2     24     23     19     16     16     23     35     80     192     157     7       3     23     25     21     18     17     21     35     74     213     156     7       4     23     26     22     20     17     22     35     72     233     159     5       5     22     25     22     20     18     22     36     68     258     172     7       6     20     23     20     19     19     21     35     61     298     173     8       7     19     25     20     19     20     22     40     57     262     142     7       8     19     31     20     19     20     23     42     53     181     149     7       9     21     29     19     19     21     23     40     57     192     139     5       10     20     26     19     22     21     23     48     59     208     137     5       11     20     25     19     20     23     23     47     60     247     132<	SEP
3     23     25     21     18     17     21     35     74     213     156     7       4     23     26     22     20     17     22     35     72     233     159     5       5     22     25     22     20     18     22     36     68     258     172     7       6     20     23     20     19     19     21     35     61     298     173     8       7     19     25     20     19     20     22     40     57     262     142     7       8     19     31     20     19     20     23     42     53     181     149     7       9     21     29     19     19     21     23     40     57     192     139     5       10     20     26     19     22     21     23     48     59     208     137     5       11     20     25     19     20     23     23     47     60     247     132     4	41
4     23     26     22     20     17     22     35     72     233     159     5       5     22     25     22     20     18     22     36     68     258     172     7       6     20     23     20     19     19     21     35     61     298     173     8       7     19     25     20     19     20     22     40     57     262     142     7       8     19     31     20     19     20     23     42     53     181     149     7       9     21     29     19     19     21     23     40     57     192     139     5       10     20     26     19     22     21     23     48     59     208     137     5       11     20     25     19     20     23     23     47     60     247     132     4	35
5     22     25     22     20     18     22     36     68     258     172     7       6     20     23     20     19     19     21     35     61     298     173     8       7     19     25     20     19     20     22     40     57     262     142     7       8     19     31     20     19     20     23     42     53     181     149     7       9     21     29     19     19     21     23     40     57     192     139     5       10     20     26     19     22     21     23     48     59     208     137     5       11     20     25     19     20     23     23     47     60     247     132     4	34
6     20     23     20     19     19     21     35     61     298     173     8       7     19     25     20     19     20     22     40     57     262     142     7       8     19     31     20     19     20     23     42     53     181     149     7       9     21     29     19     19     21     23     40     57     192     139     5       10     20     26     19     22     21     23     48     59     208     137     5       11     20     25     19     20     23     23     47     60     247     132     4	38
7 19 25 20 19 20 22 40 57 262 142 7 8 19 31 20 19 20 23 42 53 181 149 7 9 21 29 19 19 21 23 40 57 192 139 5 10 20 26 19 22 21 23 48 59 208 137 5 11 20 25 19 20 23 23 47 60 247 132 4	46
8     19     31     20     19     20     23     42     53     181     149     7       9     21     29     19     19     21     23     40     57     192     139     5       10     20     26     19     22     21     23     48     59     208     137     5       11     20     25     19     20     23     23     47     60     247     132     4	43
9 21 29 19 19 21 23 40 57 192 139 5 10 20 26 19 22 21 23 48 59 208 137 5 11 20 25 19 20 23 23 47 60 247 132 4	42
10 20 26 19 22 21 23 48 59 208 137 5 11 20 25 19 20 23 23 47 60 247 132 4	39
11 20 25 19 20 23 23 47 60 247 132 4	
12 23 22 19 18 24 26 46 66 307 130 4	
13 23 21 19 16 22 30 41 74 331 131 4	
14 23 25 22 19 22 32 41 99 302 130 4	
15 24 20 20 17 22 25 42 138 315 122 5	
16 23 26 19 17 22 26 44 178 341 112 5	
17 24 26 17 16 22 31 57 160 358 107 5	
18 26 26 15 17 21 35 55 158 364 104 5	
19 24 24 14 20 22 36 58 310 301 105 5	
20 25 27 15 20 21 35 56 335 262 109 5	
21 28 22 14 19 21 38 63 356 258 107 5	
22 25 22 17 19 22 40 72 323 249 107 4	
23 24 24 19 20 23 42 66 235 229 105 4	
24 26 24 19 20 23 55 80 210 227 102 5	
25 25 23 18 22 22 51 78 183 226 96 4	
26 28 21 18 20 22 53 88 176 213 94 4	
27 35 18 19 18 22 54 76 174 193 111 3	
28 37 21 18 16 23 56 70 224 175 149 4	
29 30 17 19 18 56 76 293 167 147 4	
30 27 15 18 17 43 80 263 159 124 5	
31 24 17 18 39 227 95 4	
TOTAL 759 704 575 576 585 1048 1618 4905 7462 3960 171	1023
MEAN 24.5 23.5 18.5 18.6 20.9 33.8 53.9 158 249 128 55.	
AC-FT 1510 1400 1140 1140 1160 2080 3210 9730 14800 7850 341	
MAX 37 31 22 22 24 56 88 356 364 173 8	
MIN 19 15 14 16 16 21 35 53 159 94 3	
CAL YR 2006 TOTAL 23208 MEAN 63.6 MAX 592 MIN 7 AC-FT 46030	

MAX DISCH: 408 CFS AT 02:30 ON Jun. 18, 2007 GH 3.17 FT. SHIFT -0.05 FT. MAX GH: 3.17 FT. AT 02:30 ON Jun. 18, 2007

68.3 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

24933 MEAN

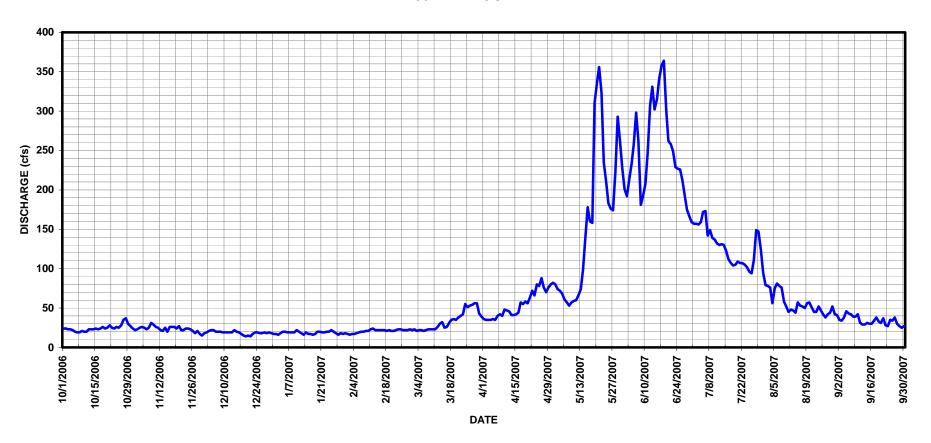
WTR YR 2007

TOTAL

364 MIN

14 AC-FT

# 06727000 BOULDER CREEK NEAR ORODELL CO WY2007 HYDROGRAPH



## BOULDER CREEK AT BOULDER, CO

LOCATION.--Lat 40° 00′ 53″, long 105° 16′ 49″, in SW SW Sec. 30, T.1N., R.70W., Boulder County, on right bank in Central Park, 1 block West of the Broadway St. Bridge over Boulder Creek. Gage is located where the center line from 11<sup>th</sup> St crosses Boulder Creek.

DRAINAGE AREA AND PERIOD OF RECORD.-N/A; May 2004 to present.

GAGE.--Sutron 8210 Data collection platform (DCP) with Acububbler stage sensor in a 12"X30"X36" NEMA shelter. The primary reference is a staff gage placed on the right side of the channel slightly downstream from the shelter. A single orifice line in 2" pipe extends from the shelter past the stream staff and into the stream at about a 45° angle to the flow. Orifice terminates in a gravel pack plastic muffler that is buried in the stream bed.

REMARKS.--Primary and only record is taken from hourly satellite data. Record is complete and reliable, except January 26, 2007 (bad value), February 24, 2007 and June 26, 2007 (when the DCP missed transmissions). Point interpolation was used to estimate record during these periods. These periods are still considered good because only one to two hours were missed each day and these values were easily interpolated from neighboring values. Record is good, except for the periods: December 2-3, 2006, January 12-15, 31, and February 1-2, 14-15, 2007, which are considered fair due to an indeterminate amount of ice. The ice did not seem to affect the shifts during the winter, so the majority of the record is not affected by the ice that was present. Station maintained and record developed by Steve Barrett.

RATING TABLE. -- BOCOBOCO03 USED FROM 01-OCT-2006 TO 30-SEPT-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

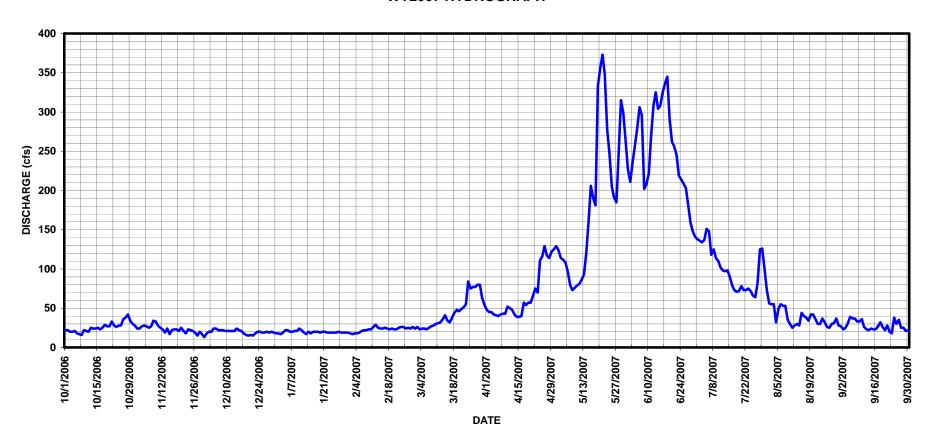
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	24	18	18	18	24	48	129	227	138	56	27
2	22	24	20	17	17	26	45	124	211	136	55	23
3	20	27	20	19	18	23	45	114	235	134	55	25
4	20	28	24	22	18	24	42	112	257	137	32	31
5	21	27	24	22	19	24	41	108	279	151	49	39
6	18	25	22	20	21	23	40	97	306	148	55	37
7	17	27	22	20	22	25	42	80	296	118	53	37
8	16	34	22	21	22	27	43	73	202	125	53	33
9	22	33	21	21	23	28	43	76	208	114	35	33
10	21	28	21	24	23	30	52	79	222	110	30	36
11	20	25	21	22	26	31	50	81	269	102	25	26
12	25	23	21	19	29	32	48	86	308	98	28	23
13	24	19	21	17	25	36	42	93	325	97	30	22
14	24	24	24	20	24	41	39	119	304	98	28	24
15	25	17	22	18	24	34	39	161	308	90	44	23
16	23	22	21	20	25	32	40	206	325	79	40	23
17	25	23	18	20	24	38	57	190	336	73	38	27
18	29	23	16	20	23	44	54	181	345	71	34	32
19	27	21	15	19	24	48	57	333	292	72	42	26
20	27	25	16	20	23	46	57	355	262	78	42	22
21	33	21	15	20	23	49	66	373	256	73	36	28
22	28	18	18	19	25	51	75	348	245	73	30	20
23	26	23	20	19	26	55	70	278	219	75 75	30	18
24	28	22	20	19	26	84	111	248	214	72	37	38
25	28	21	19	19	24	75	116	205	209	66	32	30
26	36	19	19	19	25	77	129	191	203	64	26	35
27	38	15	20	20	24	77	117	185	182	82	25	25
28	42	20	19	19	26	80	117	246	159	125	30	25
29	34	17	20	19		80	122	315	148	126	31	21
30	30	13	19	19		63	122	299	140	99	37	22
31	28	13	19	19		54	123	263	141	73	28	
21	20		10	19		34		203		/3	20	
TOTAL	799	688	616	610	647	1381	1969	5748	7493	3097	1166	831
MEAN	25.8	22.9	19.9	19.7	23.1	44.5	65.6	185	250	99.9	37.6	27.7
AC-FT	1580	1360	1220	1210	1280	2740	3910	11400	14860	6140	2310	1650
MAX	42	34	24	24	29	84	129	373	345	151	56	39
MIN	16	13	15	17	17	23	39	73	141	64	25	18
	0000		01000		55 5					11.660		

CAL YR 2006 TOTAL 21003.2 MEAN 57.5 MAX 516 MIN 7.3 AC-FT 41660 WTR YR 2007 TOTAL 25045 MEAN 68.6 MAX 373 MIN 13 AC-FT 49680

MAX DISCH: 400 CFS AT 03:00 ON May. 21, 2007 GH 3.29 FT. SHIFT -0.10 FT. MAX GH: 3.29 FT. AT 03:00 ON May. 21, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# BOULDER CREEK AT BOULDER CO WY2007 HYDROGRAPH



06729450 SOUTH BOULDER CREEK BELOW GROSS RESERVOIR NEAR COAL CREEK, CO

LOCATION.--Lat 39°56'18", long 105°20'53", NW1/4 sec. 28, T.1 S., R.71 W., Boulder County. Measures releases from Gross Reservoir; which is filled by South Boulder Creek and transmountain diversions from Moffat Tunnel.

DRAINAGE AREA AND PERIOD OF RECORD.—92.8 sq. mi. East Slope drainage (Moffat Tunnel West Slope drainage not included); Oct. 1967 to present.

GAGE.--Graphic water stage recorder and satellite monitoring (Sutron Satlink) DCP with shaft encoder in concrete
 shelter and concrete well at 25' Parshall Flume with supplemental outside staff. The primary reference is
 an electric tape gage. Station is owned and maintained by Denver Water Board personnel.

REMARKS.--Primary record is hourly DCP data with chart back up. The record is complete and reliable. Chart record was used to fill in some hours of February 17, 2007, when the DCP experienced transmission errors. There was a short period of ice-affected record January 12-13, 15, 28 and February 1-3, 2007. Gage heights during this ice period were easily interpreted due to the constant release from the reservoir. Flow values during this ice period were assumed to be the same as before and after the ice period. The record is rated good, except for periods when the flow was below 15 cfs and ice-affect days which are considered fair. The following days are rated fair: October 11-18, December 12-31, and January 1-23, 28, and February 1-3, 2007, due to low flows or ice. Station maintained by Denver Water and record developed by Steve Barrett.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
MEAN VALUES

MAR

APR

MAY

JUN

JUL

AUG

SEP

RATING TABLE. -- STD25FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

DEC

JAN

FEB

DAY

2.8

TOTAL MEAN

AC-FT

MAX

MIN

7.9

7.8

7.5

---

1926.1

64.2

7.5

1769.7

57.1

7.6

OCT

NOV

7.6 9.0 1 0 4 7.8 9.0 7.7 9.0 5.5 7.6 9.0 9.0 7.6 7.8 9.0 8.1 9.0 5.5 8.4 8.1 5.5 8.0 8.3 1.0 9.6 1.0 1.3 8.0 9.8 8.4 8.9 1.0 ٩n 9.0 9.0 1.0 9.8 9.0 2.4 9.0 9.0 1.0 8.9 9.0 

6.5

66.1

1.5

1.5

\_\_\_

50.1

\_\_\_

\_\_\_

CAL YR 2006 59859.9 MEAN 5.5 AC-FT TOTAL 164 MAX MTN 7.5 AC-FT WTR YR 2007 TOTAL 41447.6 MEAN 114 MAX MIN 

\_\_\_

---

---

302.0

10.8

9.0

MAX DISCH: 405 CFS AT 14:15 ON Jun. 13, 2007 GH 2.48 FT. SHIFT 0 FT. MAX GH: 2.48 FT. AT 14:15 ON Jun. 13, 2007

9.0

9.0

9.0

9.0

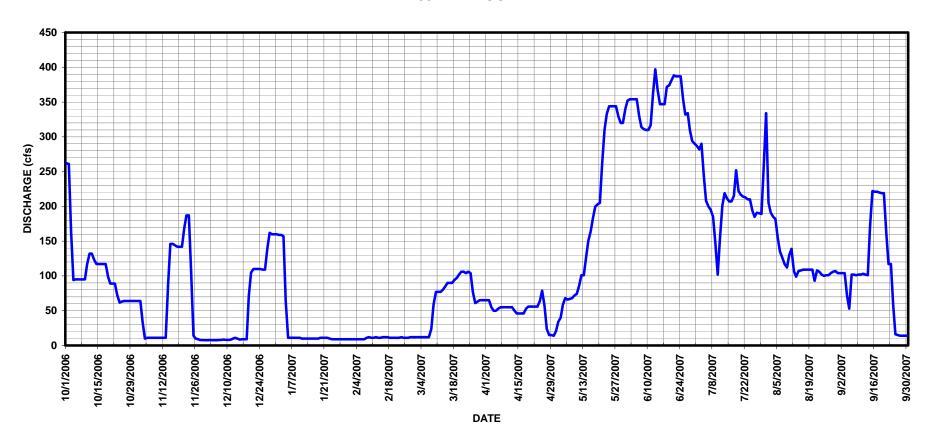
810.8

26.2

9.0

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06729450 SOUTH BOULDER CREEK BELOW GROSS RESERVOIR NEAR COAL CREEK CO WY2007 HYDROGRAPH



## SOUTH BOULDER CREEK DIVERSION NEAR ELDORADO SPRINGS, CO

LOCATION.--Lat 39°55'58", long 105°18'29", SW4 sec. 26, T.1 S., R.71 W., Boulder County. Diverts Denver Water Board rights released from Gross Reservoir to South Boulder Creek.

DRAINAGE AREA AND PERIOD OF RECORD. --N/A; Oct. 1958 to present.

GAGE.--Graphic water-stage recorder, shaft encoder and satellite monitoring DCP at 12' Parshall Flume in a timber shelter and concrete well. An electric tape is used to reference the gage, with a supplemental outside staff. Station is owned and maintained by Denver Water Board personnel.

REMARKS.--The primary record is hourly data taken from satellite monitoring with chart back up. Satellite data agreed with the recorder data within ±0.02 foot. The record is reliable and complete. The diversion was off, and/or partially off, the following days for maintenance issues: Nov 3-14, 27-30, 2006; Dec 1-19, 2006; Jan 4-31, 2007; Feb 1-28, 2007; Mar 1-8, 26-31, 2007; Apr 1-30, 2007; and May 1-21, 2007. Trickle flow (GH less than 0.10 ft.) record was zeroed out per agreement with Denver Water. The record is good. Station maintained by Denver Water and record developed by Steve Barrett.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- STD12FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	246	50	0	150	0	0	0	0	132	157	144	79
2	245	52	0	150	0	0	0	0	138	155	137	80
3	155	25	0	149	0	0	0	0	143	175	141	81
4	81	0	0	68	0	0	0	0	142	140	141	54
5	84	0	0	0	0	0	0	0	142	100	116	27
6	84	0	0	0	0	0	0	0	120	85	95	81
7	84	0	0	0	0	0	0	0	101	74	83	83
8	84	0	0	0	0	0	0	0	107	75	74	84
9	84	0	0	0	0	40	0	0	111	47	74	84
10	103	0	0	0	0	63	0	0	111	0	89	84
11	120	0	0	0	0	62	0	0	111	61	100	84
12	118	0	0	0	0	62	0	0	148	119	72	84
13	109	0	0	0	0	62	0	0	175	141	64	85
14	101	65	Ō	Ō	Ö	62	Ö	0	148	141	74	145
15	101	135	0	0	0	63	Ō	0	125	141	75	201
16	102	135	0	0	0	59	Ō	0	125	141	75	201
17	103	135	0	0	0	56	0	Õ	125	154	75	201
18	102	135	0	0	0	59	0	0	125	181	75	201
19	87	135	52	Ö	0	61	Ö	Ő	125	151	75	201
20	76	135	93	0	0	62	0	0	155	151	75	201
21	76	156	101	Ö	0	64	0	42	175	150	60	145
22	76	175	100	0	0	62	0	75	181	150	75	101
23	62	175	98	0	0	59	0	88	191	152	75	101
24	50	102	99	0	0	58	0	100	195	151	74	47
25	50	0	99	0	0	58	0	100	170	135	73	0
26	50	0	99	0	0	25	0	100	159	128	74	0
27	50	0	126	0	0	0	0	100	165	135	74	0
28	50	0	151	0	0	0	0	100	153	130	74	0
29	50	0	150	0		0	0	100	152	126	75	0
30	50	0	150	0		0	0	100	158	194	77	0
31	50		150	0		0		118	130	273	76	
31	30		130	U		U		110		213	70	
TOTAL	2883	1610	1468	517	0	1037	0	1023	4308	4113	2661	2735
MEAN	93.0	53.7	47.4	16.7	0	33.5	0	33.0	144	133	85.8	91.2
AC-FT	5720	3190	2910	1030	0	2060	0	2030	8540	8160	5280	5420
MAX	246	175	151	150	0	64	0	118	195	273	144	201
MIN	50	0	0	0	0	0	0	0	101	0	60	0

MAX DISCH: 304 CFS AT 15:45 ON Jul. 18, 2007 GH 3.22 FT. SHIFT 0 FT. MAX GH: 3.22 FT. AT 15:45 ON Jul. 18, 2007

149 MAX

61.2 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

41538 MEAN

22355 MEAN

CAL YR 2006

WTR YR 2007

TOTAL

TOTAL

352 MIN

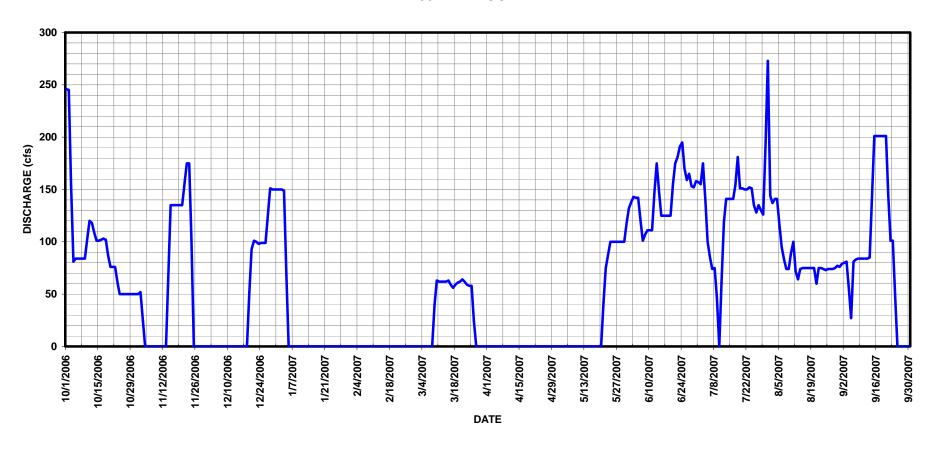
273 MIN

0 AC-FT

0 AC-FT

82390

# SOUTH BOULDER CREEK DIVERSION NEAR ELDORADO SPRINGS CO WY2007 HYDROGRAPH



## 06729500 SOUTH BOULDER CREEK NEAR ELDORADO SPRINGS, CO

LOCATION.--Lat 39°55'51", long 105°17'44", in SW1/4 sec. 25, T.1 S., R.71 W., Boulder County, Hydrologic Unit 10190005, on left bank 0.2 mi downstream from South Draw, 1.0 mi west of Eldorado Springs, 1.8 mi downstream from South Boulder diversion canal, 5.0 mi south of Boulder, and 6.7 mi downstream from Gross Reservoir.

DRAINAGE AREA AND PERIOD OF RECORD. -- 109 mi<sup>2</sup>; Apr. 1888-Oct. 1892, May 1895-Sept. 1901, Aug. 1904 to present.

GAGE.--Graphic water stage recorder and Sutron High Data Rate (HDR) satellite monitoring DCP in metal box shelter and corrugated metal pipe well. Supplemental outside chain gage. The data collection platform (DCP) is the primary record having the graphic chart as a backup.

REMARKS.--The primary record is hourly data taken from satellite monitoring with chart back up. Satellite data agreed with the recorder data within ±0.02 foot. Hourly values were taken from the chart (due to missing DCP data) on the following days: Oct 25, 2006, April 1, 2007, and July 6, 2007. The record is reliable and complete, except for the following periods: November 28-30, 2006, when ice affected the stage discharge relationship; and December 1, 2006- March 9, 2007, when the station was closed for winter. The record is good, except for November 28, 2006 - March 9, 2007, which is estimated and fair. Station maintained and record developed by Steve Barrett.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

RATING TABLE. -- BOCELSCO23 USED FROM 01-OCT-2006 TO 30-SEP-2007

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	18	7.6	9.0	9.0	12	73	50	215	134	57	28
2	17	16	7.8	9.0	9.0	12	72	57	212	129	49	25
3	19	16	7.7	8.0	9.0	12	63	61	208	119	41	25
4	16	11	7.6	4.0	9.0	12	55	75	211	111	37	26
5	13	11	7.6	11	9.0	12	55	89	211	113	37	20
6	13	11	7.8	11	9.0	12	57	88	210	121	34	24
7	13	11	8.1	11	9.0	12	59	87	211	127	39	22
8	13	10	8.4	11	11	23	59	87	203	117	38	20
9	13	11	8.1	11	12	19	58	88	196	109	35	20
10	14	10	8.0	11	11	20	58	91	197	106	36	21
11	17	10	8.3	10	11	23	56	98	205	92	34	21
12	18	11	9.6	10	12	24	56	113	215	82	33	19
13	19	10	11	10	11	27	52	112	221	79	31	19
14	18	14	9.8	10	11	36	46	132	221	72	31	20
15	18	17	8.4	10	12	40	45	153	221	64	30	21
16	17	17	8.9	10	12	40	45	167	224	64	30	21
17	17	15	9.0	10	12	44	49	184	224	57	30	21
18	17	12	9.0	10	11	46	53	197	241	68	30	21
19	17	12	20	11	11	48	59	201	247	68	30	20
20	17	12	12	11	11	51	60	199	226	65	30	20
21	18	13	9.0	11	11	53	60	209	217	61	30	24
22	17	14	10	11	11	54	60	224	211	60	30	19
23	16	14	12	9.8	12	58	60	231	201	55	29	19
24	16	19	11	9.0	11	72	85	232	195	54	26	23
25	17	17	10	9.0	11	72	106	233	189	55	23	16
26	20	11	10	9.0	11	77	98	232	179	53	23	15
27	18	9.6	14	9.0	12	79	75	231	176	51	23	14
28	18	7.9	11	9.0	12	79	65	222	161	55	25	14
29	18	7.8	10	9.0		80	59	215	142	59	26	14
30	18	7.5	10	9.0		77	51	215	135	56	29	13
31	18		10	9.0		75		215		56	29	
TOTAL	517	375.8	301.7	301.8	302.0	1301	1849	4788	6125	2512	1005	605
MEAN	16.7	12.5	9.73	9.74	10.8	42.0	61.6	154	204	81.0	32.4	20.2
AC-FT	1030	745	598	599	599	2580	3670	9500	12150	4980	1990	1200

8.0

12

106

345 MIN

247 MIN

4.5

MAX DISCH: 268 CFS AT 13:00 ON Jun. 18, 2007 GH 2.75 FT. SHIFT 0 FT. MAX GH: 2.75 FT. AT 13:00 ON Jun. 18, 2007

11

4.0

12

9.0

51.2 MAX

54.7 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

20

7.6

TOTAL 18700.7 MEAN TOTAL 19983.3 MEAN

MAX

MTN

CAL YR 2006

WTR YR 2007

20

1.3

19

7.5

247

135

134

37090

39640

51

57

2.3

28

1.3

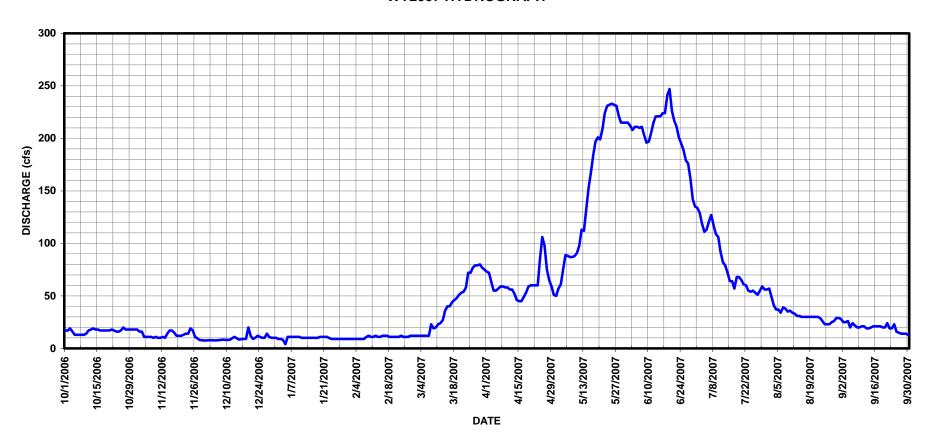
233

50

5.6 AC-FT

4 AC-FT

# 06729500 SOUTH BOULDER CREEK NEAR ELDORADO SPRINGS CO WY2007 HYDROGRAPH



## 06730300 COAL CREEK NEAR PLAINVIEW, CO

LOCATION.--Lat 39°52'40", long 105°16'39" (Eldorado Springs Quad. 1965, 1:24,000 scale) in SE1/4, NE1/4, Sec. 13, T. 2S, R. 71W, Jefferson County, on left bank 100 ft upstream from culvert on State Hwy 72, 1.2 miles south of Plainview, 5 miles downstream from Beaver Creek and 9 miles north of Golden, CO.

DRAINAGE AREA AND PERIOD OF RECORD. -- 15.1 mi<sup>2</sup>; Aug. 1959 to present.

GAGE.--Graphic water-stage recorder and satellite monitoring in a 42-inch diameter corrugated metal shelter. The primary reference is a drop tape with a supplemental outside staff gage.

REMARKS.--Hourly data from the DCP is the primary record, with the recorder as back up. DCP record is complete and reliable, except for the following days, which appeared to be ice affected and were estimated: November 28-30, December 3, 20-21, 28-29, 2006, January 8, 2007. Ice affect was possible at the gage from November 28, 2006 thru February 5, 2007. Ice affects included backwater from ice on the control and ice in the well interfering with the readings. Useable GH record is still possible with ice on the control. The record is considered good, except for the winter period November 28, 2006 thru February 5, 2007. These days are considered estimated and poor due to ice affect: November 28-30, December 3, 20-21, 28-29, 2006, January 8, 2007. All other days between November 28, 2006 and February 5, 2007 are considered fair due to possible ice-affect. Station maintained and record developed by Steve Barrett.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

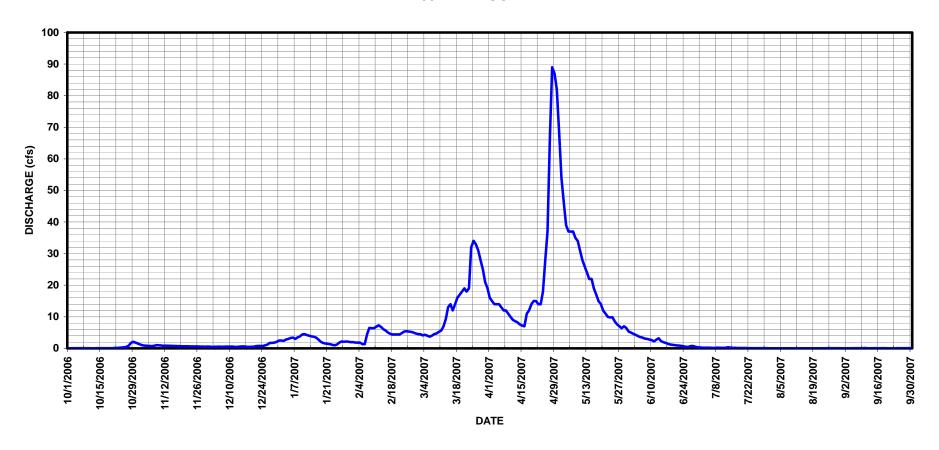
RATING TABLE. -- COCREPCO09 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	0	1.2	.55	2.5	2.0	4.5	16	68	5.0	.25	.01	.02		
2	.01	.97	.47	2.4	1.8	4.5	15	54	4.6	.21	.01	.01		
3	.04	.88			1.8	4.1	14	46	4.3	.18	.02	.01		
4	.06	.80			1.8	4.3	14	39	3.9	.21	.02	.02		
5	.04	.76			1.3	4.0	14	37	3.6	.19	.01	.05		
6	.04	.72	.53	3.4	1.3	3.7	13	37	3.4	.15	.01	.05		
7	.03	.79			4.5	4.0	12	37	3.1	.12	.02	.03		
8	.05	1.0			6.5	4.5	12	35	3.0	.19	0	.03		
9	.05	.98			6.4	4.7	11	34	2.8	.18	0	.06		
10	.03	.89	.55	4.4	6.4	5.2	10	31	2.6	.13	0	.09		
11	.02	.83	.55	4.5	6.9	5.6	9.0	28	2.2	.14	0	.05		
12	.01	.86	.47	4.2	7.3	6.9	8.6	26	2.8	.20	0	.02		
13	.03	.81	.47	4.0	6.8	9.3	8.2	24	3.2	.35	0	.01		
14	.03	.83	.57	3.8	6.1	13	7.6	22	2.3	.20	0	.04		
15	.03	.75	.63	3.7	5.6	14	7.2	22	2.0	.16	0	.03		
16	.03	.76	.61	3.4	5.0	12	7.0	19	1.7	.13	0	.01		
17	.05	.73	.50	2.8	4.6	14	11	17	1.4	.10	0	.04		
18	.06	.71	.47	2.1	4.4	16	12	15	1.2	.09	0	.03		
19	.04	.67	.49	1.7	4.4	17	14	14	1.1	.12	0	.03		
20	.05	.67	.50	1.5	4.4	18	15	12	1.0	.10	0	.01		
21	.08	.68	.70	1.4	4.4	19	15	11	.89	.08	0	0		
22	.11	.64	.76	1.3	4.8	18	14	10	.87	.06	0	0		
23	.19	.62	.76	1.1	5.3	19	14	9.8	.77	.05	0	0		
24	.25	.62	.78	.98	5.4	32	18	9.9	.60	.04	.02	.07		
25	.28	.61	.95	1.2	5.3	34	28	8.5	.44	.03	.03	.07		
26	.44	.59	1.2	1.8	5.2	33	37	7.6	.52	.04	.04	.05		
27	.81	.56			5.0	31	67	7.0	.75	.06	.05	.03		
28	1.7	.55			4.7	28	89	6.4	.71	.05	.05	.03		
29	2.1	.50				25	87	7.0	.47	.05	.04	.03		
30	1.8	.55				21	82	6.5	.30	.03	.03	.04		
31	1.5		2.5	2.0		19		5.3		.02	.02			
TOTAL	9.96	22.53			129.4	448.3	681.6	706.0	61.52	3.91	.38	.96		
MEAN	.32	.75			4.62	14.5	22.7	22.8	2.05	.13	.012	.032		
AC-FT	20	45			257	889	1350	1400	122	7.8	. 8	1.9		
MAX	2.1	1.2			7.3	34	89	68	5.0	.35	.05	.09		
MIN	0	.50	.47	.98	1.3	3.7	7.0	5.3	.30	.02	0	0		
CAL YR	2006	TOTAL	190.26	MEAN	0.52 MAX	2.		0		377				
WTR YR	2007	TOTAL	2172.24	MEAN	5.95 MAX	8	9 MIN	0	AC-FT	4310				

MAX DISCH: 92 CFS AT 22:30 ON Apr. 27, 2007 GH 1.6 FT. SHIFT -0.02 FT. MAX GH: 1.6 FT. AT 22:30 ON Apr. 27, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06730300 COAL CREEK NEAR PLAINVIEW CO WY2007 HYDROGRAPH



## 06731000 ST. VRAIN CREEK AT MOUTH, NEAR PLATTEVILLE, CO

**LOCATION.**—Lat  $40^{\circ}15^{\circ}29^{\circ}$ , long  $104^{\circ}52^{\circ}45^{\circ}$ , in SE4NW4 sec. 3, T,3 N., R.67 W., Weld County, Hydrologic Unit 10190005, on right bank 140 ft downstream from bridge on county road, 1.3 mi upstream from mouth, and 4.2 mi northwest of Platteville.

DRAINAGE AREA AND PERIOD OF RECORD. -- 976 mi2; 1927 to present.

GAGE.--Graphic water-stage recorder and satellite monitoring DCP in a 54-inch metal pipe shelter and well. Data collection platform is the primary record with graphic chart as backup. Primary reference is an electric tape gage located inside the shelter. A 3.33-ft outside staff gage is driven into the stream bed as a supplemental reading for low flows, however the channel has slowly moved away from the staff leaving it land-locked.

REMARKS.--The primary record is hourly DCP data—with graphical chart record as backup. The record is complete and reliable except as follows: Dec. 20, 2006 through Feb. 15, 2007 due to ice affecting the stagedischarge relationship; 1300-1700 May 14, 2007, when equipment in station was removed in order to replace recorder shelf. All satellite data used agreed with the mean daily gage heights taken from the chart to within ±0.02 feet. Encoder calibration was supported by 27 visits to the gage. The record is complete and reliable, except for a period of ice affect Feb 18-22, 2006. The record is good, except for days affected by ice, Dec. 20, 2006 through Feb. 15, 2007, which are estimated and considered poor. Station maintained and record developed by Patrick Tyler.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

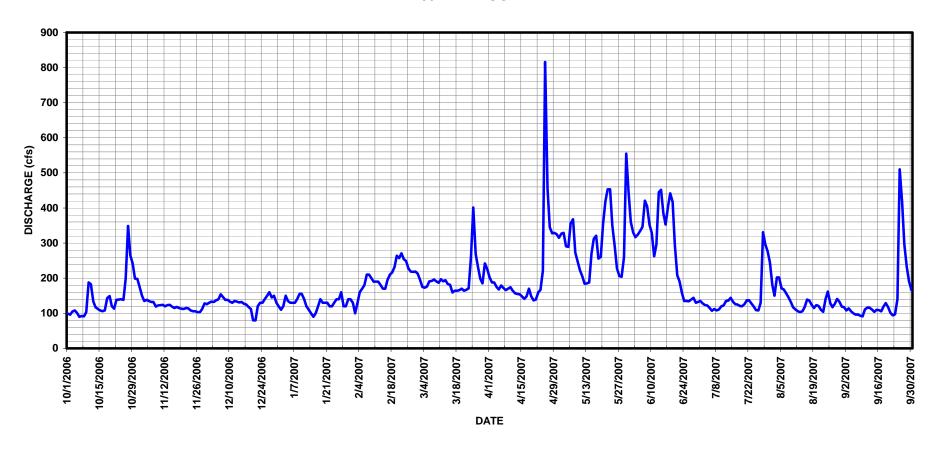
RATING TABLE. -- SVCPLACO27 USED FROM 01-OCT-2006 TO 30-SEP-2007

MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	175	130	110	130	213	203	315	360	135	181	117
2	96	150	133	120	100	195	188	327	330	128	150	108
3	105	135	132	150	130	175	188	329	317	123	202	114
4	108	138	137	135	160	173	175	291	324	122	202	106
5	101	135	140	130	170	176	168	289	334	115	171	100
6	90	132	154	130	180	191	179	356	346	107	168	96
7	92	132	146	130	210	192	172	368	421	112	157	96
8	91	119	138	140	210	196	166	273	405	108	146	93
9	103	122	138	155	200	191	170	247	352	111	132	91
10	188	123	133	155	190	187	174	223	329	120	117	111
11	183	124	130	140	190	197	164	205	262	122	111	116
12	134	120	135	120	190	191	157	184	296	135	106	116
13	117	123	133	110	180	194	155	185	445	136	103	111
14	112	124	131	100	170	183	154	188	452	144	106	104
15	108	119	132	90	170	181	148	271	385	133	118	110
16	106	115	127	100	195	159	141	312	353	126	139	109
17	108	118	125	120	210	164	148	321	404	125	136	106
18	143	115	118	140	216	164	170	256	442	121	124	119
19	149	113	112	130	232	166	148	261	417	120	115	129
20	120	112	80	130	264	170	137	354	293	126	123	117
21	113	115	80	130	257	164	139	420	208	137	121	101
22	138	114	120	120	271	167	159	453	191	137	110	94
23	139	108	130	120	254	171	167	453	158	128	104	97
24	140	106	130	130	249	263	221	350	135	119	141	140
25	138	106	140	140	228	401	816	291	135	109	162	510
26	199	103	150	140	219	269	456	228	134	108	129	418
27	349	103	160	160	218	233	345	206	139	130	117	297
28	265	112	145	120	219	199	328	204	144	331	127	233
29	241	128	150	120		185	329	260	130	297	141	192
30	199	126	130	140		242	325	555	132	276	132	167
31	198		120	140		227		445		245	119	
TOTAL	4472	3665	4059	3995	5612	6179	6590	9420	8773	4486	4210	4418
MEAN	144	122	131	129	200	199	220	304	292	145	136	147
AC-FT	8870	7270	8050	7920	11130	12260	13070	18680	17400	8900	8350	8760
MAX	349	175	160	160	271	401	816	555	452	331	202	510
MIN	90	103	80	90	100	159	137	184	130	107	103	91
CAL YR	2006	TOTAL		MEAN	127 MAX		320 MIN	53	AC-FT	92090		
WTR YR	2007	TOTAL	65879	MEAN	180 MAX	8	16 MIN	80	AC-FT	130700		

MAX DISCH: 975 CFS AT 15:00 ON Apr. 25, 2007 GH 5.06 FT. SHIFT -0.51 FT. MAX GH: 5.06 FT. AT 15:00 ON Apr. 25, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06731000 ST. VRAIN CREEK AT MOUTH NEAR PLATTEVILLE CO WY2007 HYDROGRAPH



## WIND RIVER ABOVE ADAMS TUNNEL NEAR ESTES PARK, CO

LOCATION. -- Lat 40°19'38", long 105°34'53"

DRAINAGE AREA. --N/A

GAGE.--Graphic water-stage record and Satellite Monitoring Data Collection Platform (DCP) and shaft encoder in a wooden shelter with an electric drop tape at a 4-foot steel Parshall Flume. A secondary staff is located on the left wing wall at the flume's H<sub>a</sub> location. The DCP is the primary record with chart record as backup. On April 2, 2007 the chart recorder was removed and replaced by a Sutron Stage Discharge Recorder (SDR) as backup to the DCP record. The station is maintained in cooperation with the United States Bureau of Reclamation (USBR) and Colorado Division of Water Resources (DWR).

REMARKS.—The primary record is hourly averages of 15-minute DCP data with chart and SDR as backup. It is complete and reliable, except for the following days: October 26, 27, 31 and November 1-2, 2006 when the stage-discharge relationship was affected by ice; November 2, 2006 to April 2, 2007, when the station was closed for winter, no gage-height information available. This is a partial year record. Period of use for the 2007 Water Year is October 1 to November 2, 2006 and April 2 to September 30, 2007. Formerly called "Wind River Near Estes Park", this station is operated as part of the C-BT system to determine east slope inflow into the system. The record is good, except for October 26, 27, 30, November 1-2, 2006, which were estimated and are poor due to ice affect; April 2, 2007 which is based on partial day record, and is estimated and fair; and mean daily flows below 1.3 cfs, which are fair. Stream flows are affected by diversion above the station amounting to approximately 300 AF per water year. Station maintained by USBR and DWR personnel, and record developed by Russell Stroud.

RATING TABLE. -- STD4FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

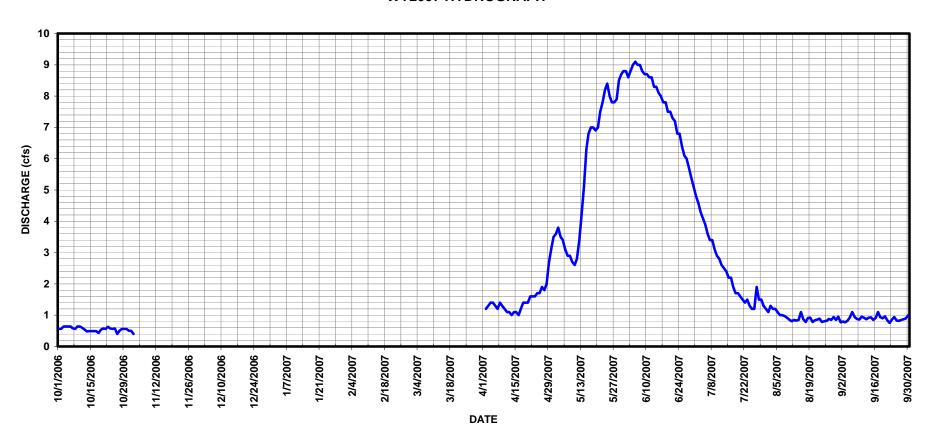
DISCHARGE,	ΙN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007	
MEAN VALUES										

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	.50						3.5	8.8	4.8	1.1	.77
2	.57	.40					1.2	3.6	8.6	4.6	1.3	.80
3	.64						1.3	3.8	8.8	4.3	1.2	.77
4	.64						1.4	3.5	9.0	4.1	1.2	.83
5	.64						1.4	3.4	9.1	3.9	1.1	.93
6	.64						1.3	3.1	9.0	3.6	1.0	1.1
7	.58						1.2	2.9	9.0	3.4	1.0	.94
8	.56						1.4	2.9	8.8	3.4	.97	.88
9	.64						1.3	2.7	8.7	3.1	.92	.86
10	.64						1.2	2.6	8.7	2.9	.86	.95
11	.60						1.1	2.8	8.6	2.8	.81	.92
12	.54						1.1	3.4	8.6	2.6	.85	.87
13	.48						1.0	4.2	8.3	2.5	.83	.92
14	.49						1.1	5.1	8.3	2.4	.85	.93
15	.49						1.1	6.3	8.1	2.2	1.1	.85
16	.49						1.0	6.8	8.0	2.2	.87	.91
17	.49						1.2	7.0	7.8	1.9	.78	1.1
18	.43						1.4	7.0	7.8	1.7	.91	.94
19	.53						1.4	6.9	7.5	1.7	.92	.90
20	.58						1.4	7.0	7.5	1.6	.78	.96
21	.56						1.6	7.5	7.3	1.5	.84	.84
22	.63						1.6	7.8	7.2	1.4	.86	.75
23	.58						1.6	8.2	6.8	1.5	.89	.86
24	.56						1.7	8.4	6.8	1.3	.78	.94
25	.58						1.7	8.0	6.4	1.2	.81	.83
26	.40						1.9	7.8	6.1	1.2	.82	.82
27	.50						1.8	7.8	6.0	1.9	.88	.85
28	.56						2.0	7.9	5.7	1.5	.85	.87
29	.56						2.7	8.5	5.4	1.5	.94	.90
30	.56						3.1	8.7	5.1	1.3	.85	1.0
31	.50							8.8		1.2	.95	
TOTAL	17.22	.90					43.2	177.9	231.8	75.2	28.82	26.79
MEAN	.56	.45					1.49	5.74	7.73	2.43	.93	.89
AC-FT	34	1.8					86	353	460	149	57	53
MAX	.64	.50					3.1	8.8	9.1	4.8	1.3	1.1
MIN	.40	.40					1.0	2.6	5.1	1.2	.78	.75
CAL YR	2006	TOTAL	231.4 MEA	N	1.10 MAX	4.1	MIN	. 4	AC-FT	458 (P	ARTTAL YE	AR RECORD)
WTR YR	2007	TOTAL	601.83 MEA		2.8 MAX	9.1			AC-FT			AR RECORD)
110	2007	1011111	001.00 11111		2.0 11111	J. 1		• •		1100 (11		1

MAX DISCH: 9.32 CFS AT 07:30 ON Jun. 5, 2007 GH 0.71 FT. SHIFT 0 FT. MAX GH: 0.71 FT. AT 07:30 ON Jun. 5, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# WIND RIVER ABOVE ADAMS TUNNEL NEAR ESTES PARK CO WY2007 HYDROGRAPH



## WIND RIVER BELOW ADAMS TUNNEL NEAR ESTES PARK, CO

LOCATION. -- Lat 40°19'38", long 105°34'53"

DRAINAGE AREA. --N/A

MAX GH: 0.58 FT. AT 10:00 ON May. 3, 2007

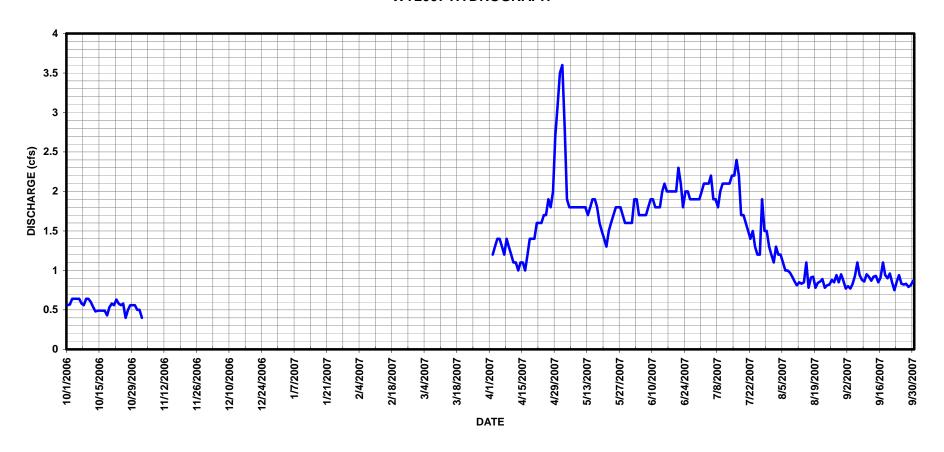
GAGE.--Incremental shaft encoder in a 30-inch CMP shelter and well at a 3-foot Cipolletti weir. Primary reference gage is a drop tape with a supplemental outside staff gage. The shaft encoder is wired to the Data Collection Platform in the Adams Tunnel gage. The station is maintained in cooperation of the United States Bureau of Reclamation (USBR) and Colorado Division of Water Resources (DWR) to determine east slope flows into the Colorado Big Thompson (C-BT) system at Adam's Tunnel. This gage is used to compute the amount of Wind River water being 'skimmed' into the C-BT system. The amount of skim water is the difference between the two gages: Wind River above (WINDESCO) and below (WINBYPCO) Adams Tunnel: (Wind River skim = WINDESCO - WINBYPCO). When water is not being skimmed, all flow bypasses Adams Tunnel through a pipeline and the 3-foot Cipolletti weir records the same water as the WINDESCO flume. The USBR does not divert flow into the C-BT system when the native flow in Wind River is 2 cfs of less. Skim operations are not performed during winter periods.

REMARKS.--The record is hourly averages of 15-minute DCP data. There is no backup record installed at this site. The gage height record was only evaluated for the skim period. Skimming operations occurred between May 3, 2007 and July 17, 2007. During the skim period the record is complete and reliable, except for June 27-28, 2007, when debris was hanging on the control. A coupling was added to the inlet prior to skimming on May 3, 2007 to help with plugging issues experience earlier in the year. Eight visits were made during the skim period with no plugging, or instrumentation drift noted. Discharge values for the nonskim period of the record are from the WINDESCO record. See the WINDESCO record for gage height record comments and record rating for the non skim periods. WINBYPCO gage was used for the skim period only and is considered good, except for June 27-28, 2007, when the gage was affected by debris on the control. Station maintained by USBR and DWR personnel, and record developed by Russell Stroud.

RATING TABLE.--WINBYPCO02 USED FROM 03-MAY-2007 TO 17-JUL-2007 "SKIMMING" PERIOD WINDESCO DAILY DISCHARGE VALUES USED FROM 01-OCT-2007 TO 02-MAY-2007 AND 18-JUL-2007 TO 30-SEP-2007 DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

					ME	AN VALUES						
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	.50						3.5	1.6	2.0	1.1	.77
2	.57	.40					1.2	3.6	1.9	2.1	1.3	.80
3	.64						1.3	2.8	1.9	2.1	1.2	.77
4	.64						1.4	1.9	1.7	2.1	1.2	.83
5	.64						1.4	1.8	1.7	2.2	1.1	.93
6	.64						1.3	1.8	1.7	1.9	1.0	1.1
7	.58						1.2	1.8	1.7	1.9	1.0	.94
8	.56						1.4	1.8	1.8	1.8	.97	.88
9	.64						1.3	1.8	1.9	2.0	.92	.86
10	.64						1.2	1.8	1.9	2.1	.86	.95
11	.60						1.1	1.8	1.8	2.1	.81	.92
12	.54						1.1	1.8	1.8	2.1	.85	.87
13	.48						1.0	1.7	1.8	2.1	.83	.92
14	.49						1.1	1.8	2.0	2.2	.85	.93
15	.49						1.1	1.9	2.1	2.2	1.1	.85
16	.49						1.0	1.9	2.0	2.3	.78	.91
17	.49						1.2	1.8	2.0	2.2	.91	1.1
18	.43						1.4	1.6	2.0	1.7	.92	.94
19	.53						1.4	1.5	2.0	1.7	.78	.90
20	.58						1.4	1.4	2.0	1.6	.84	.96
21	.56						1.6	1.3	2.3	1.5	.86	.84
22	.63						1.6	1.5	2.1	1.4	.89	.75
23	.58						1.6	1.6	1.8	1.5	.78	.86
24	.56						1.7	1.7	2.0	1.3	.70	.94
25	.58						1.7	1.8	2.0	1.2	.82	.83
26	.40						1.9	1.8	1.9	1.2	.88	.82
27	.50						1.8	1.8	2.1	1.9	.85	.83
28	.56						2.0	1.7	2.1		.03	.79
29	.56						2.7		1.9	1.5		.79
								1.6		1.5	.85 .95	.81
30	.56						3.1	1.6	1.9	1.3	.95	.0/
31	.50							1.6		1.2		
TOTAL	17.22	.90					43.2	57.6	57.0	56.1	27.82	26.47
MEAN	.56	.45					1.49	1.86	1.90	1.81	.93	.88
AC-FT	34	1.8					86	114	113	111	57	53
MAX	.64	.50					3.1	3.6	2.3	2.4	1.3	1.1
MIN	.40	.40					1.0	1.3	1.6	1.2	.78	.75
	2006 2007 CH: 3.91	TOTAL TOTAL	231.4 ME 286.94 ME 10:00 ON	AN	1.10 MAX 1.34 MAX	4.1 3.6 0.58 FT.	MIN MIN SHIFT		AC-FT AC-FT			AR RECORD) AR RECORD)
			.00 017 14-				V	0.00 11	•			

# WIND RIVER BELOW ADAMS TUNNEL NEAR ESTES PARK CO WY2007 HYDROGRAPH



06733000 BIG THOMPSON RIVER (above Lake Estes) AT ESTES PARK, CO

LOCATION.--Lat 40°22'42", long 105°30'48", in NW\NW\ sec. 30, T.5 N., R.72 W,, Larimer County on right bank in Estes Park, 600 ft downstream from bridge on State Highways 7 and 66, 900 ft downstream from Black Canyon Creek, and 0.3 mi northwest of Estes Power Plant. Station is upstream from Lake Estes.

DRAINAGE AREA AND PERIOD OF RECORD. -- 137 mi<sup>2</sup>. October 1946 to current year.

GAGE.—Steven's Type A graphic water-stage recorder and satellite monitoring data collection platform (DCP) in a 4 ft x 4 ft precast concrete shelter and stilling well at a 15 foot concrete Parshall Flume with overflow bays flanking the flume. The primary reference is an electric tape gage in the shelter with two supplementary outside staff gages. One supplementary staff is located in the flume's Ha location and the second staff is located on the backside of the shelter. The second staff is only used when the flume's overflow bays are in use. The chart recorder was removed and replaced with a Sutron Stage Discharge Recorder (SDR) during the 2007 water year. The gage is maintained in cooperation of the United States Bureau of Reclamation (USBR) and the Colorado Division of Water Resources (DWR). Datum of gage is 7,492.5 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--The primary record is hourly averages of 15-minute DCP data, with chart and SDR data as backup. The record is complete and reliable except as follows: October 27, 2006, when the gage was ice affected; November 13, 2006 to March 21, 2007, when the gage was shut off for winter; March 23 and 24, 2007, due to DCP failure (adjusted SDR data were used without loss of accuracy); and September 21 to 30, 2007, when the USBR initiated flume repair construction. A coffer dam was placed upstream of the flume and flow was diverted over the left overflow bay. Water seeping behind the coffer dam was captured and pumped over the right overflow bay. The data can be regarded as very reliable, as the gage is visited frequently and even 0.01 adjustments to the stage encoder are rare. Record is good, except for periods of no gage height or ice affected record, which were estimated and are considered fair to poor; and the period of flume repair, which was estimated and is considered fair. Record developed by Russell Stroud.

RATING TABLE. -- BTABESCO09 USED FROM 01-OCT-2006 TO 30-SEP-2007

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
1	38	31	8.0	15	10	15	44	214	260	279	126
2	36	34	7.0	15	10	15	43	219	251	277	135
3	37	34	7.0	20	15	15	41	232	330	267	217
4	40	33	12	20	15	15	41	246	379	263	164
_	2.0	2.2	2.0	1.0	1 -	1 =	11	1 0 1	410	270	1 4 0

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

SEP

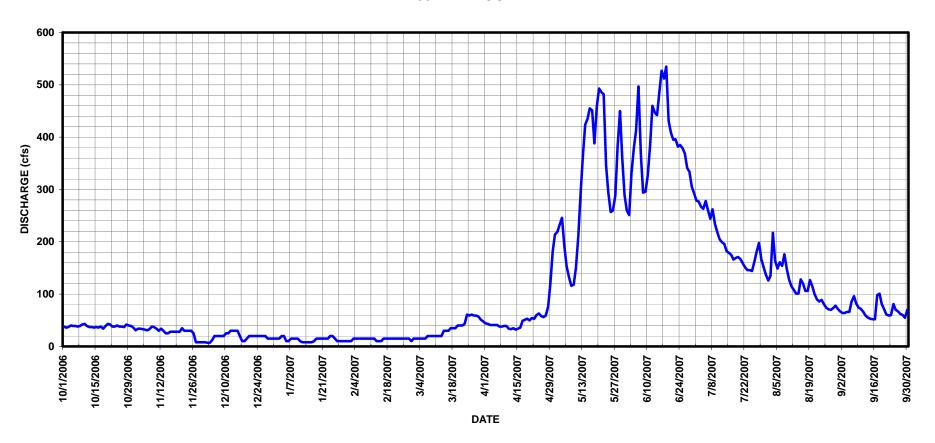
2	36	34	7.0	15	10	15	43	219	251	277	135	64
3	37	34	7.0	20	15	15	41	232	330	267	217	64
4	40	33	12	20	15	15	41	246	379	263	164	66
5	39	32	20	10	15	15	41	191	413	278	149	66
6	39	31	20	10	15	15	41	153	497	261	161	86
7	38	33	20	15	15	20	38	132	366	244	154	96
8	39	38	20	15	15	20	38	116	294	262	176	82
9	42	37	20	15	15	20	39	118	296	234	148	74
10	43	34	25	15	15	20	39	150	327	218	128	72
11	39	30	25	10	15	20	34	211	386	205	115	66
12	37	34	30	8.0	15	20	33	291	460	199	108	59
13	37	30	30	8.0	10	20	35	366	447	196	101	55
14	36	25	30	8.0	10	30	32	424	442	182	101	53
15	37	25	30	8.0	10	30	34	435	486	179	128	52
16	36	28	20	8.0	15	30	36	455	527	175	120	52
17	38	28	10	10	15	35	49	451	512	166	106	98
18	34	28	10	15	15	35	51	388	535	169	106	101
19	39	28	15	15	15	35	53	458	431	171	127	81
20	43	28	20	15	15	40	50	493	409	167	115	71
21	42	35	20	15	15	40	54	486	395	159	100	61
22	38	30	20	15	15	40	53	482	396	151	90	59
23	38	30	20	15	15	43	60	346	382	146	86	60
24	40	30	20	20	15	61	63	294	385	146	89	81
25	38	30	20	20	15	59	58	257	379	144	81	70
26	38	25	20	15	15	61	56	260	369	162	74	67
27	37	8.0	20	10	15	59	59	289	341	181	71	62
28	42	8.0	15	10	10	59	76	382	334	198	70	60
29	40	8.0	15	10		57	119	450	305	167	73	55
30	39	8.0	15	10		51	182	360	293	151	78	70
31	36		15	10		48		289		137	72	
TOTAL	1195	833.0	579.0	405.0	390	1043	1592	9638	11627	6134	3569	2070
MEAN	38.5	27.8	18.7	13.1	13.9	33.6	53.1	311	388	198	115	69.0
AC-FT	2370	1650	1150	803	774	2070	3160	19120	23060	12170	7080	4110
MAX	43	38	30	20	15	61	182	493	535	279	217	101
MIN	34	8.0	7.0	8.0	10	15	32	116	251	137	70	52
CAL YR	2006	TOTAL	33791	MEAN	92.6 MAX	64	3 MIN	7	AC-FT	67020		

WTR YR 2007 TOTAL 39075 MEAN 107 MAX 535 MIN 7 AC-FT 77510

MAX DISCH: 646 CFS AT 00:15 ON Jun. 18, 2007 GH 4.36 FT. SHIFT 0.16 FT.

MAX GH: 4.36 FT. AT 00:15 ON Jun. 18, 2007

# 06733000 BIG THOMPSON RIVER ABOVE LAKE ESTES AT ESTES PARK CO WY2007 HYDROGRAPH



## 06734500 FISH CREEK NEAR ESTES PARK, CO

LOCATION.--Lat 40°22'06", long 105°29'35", SW4 sec. 29, T.5 N., R.72 W.

DRAINAGE AREA AND PERIOD OF RECORD. -- 16.9 mi<sup>2</sup>; 1946 to present.

GAGE. -- Graphical chart recorder and an incremental shaft encoder connected to a high data rate Sutron SatLink 2 Data Collection Platform (DCP) in a 4 foot by 4 foot concrete shelter and stilling well at a 5' Parshall Flume. An electric drop tape is the primary reference gage. There is a supplemental outside staff gage.

REMARKS.--The primary record is hourly averages of 15-minute satellite monitoring data with chart back up. The record is complete and reliable, except for the following periods: October 26, 2006 , when the DCP missed 4 hours and the clock stopped on chart recorder. Data were interpolated from adjacent good record. November 13, 2006 to April 2, 2007, when the gage was shut off for winter. No gage-height record is available. April 2-5, 2007, when DCP initialization failed (chart record used without loss of accuracy). The record is good, except as follows: when average daily flows are below 1.6 cfs occurring October 1-November 13, 2006 and portions of July to September, 2007, which are considered fair; October 26, 2006, record is fair due to primary and secondary records were missing 4 hours; November 13, 2006 to April 2, 2007 when the gage was off for winter. Station maintained and record developed by Russell Stroud.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

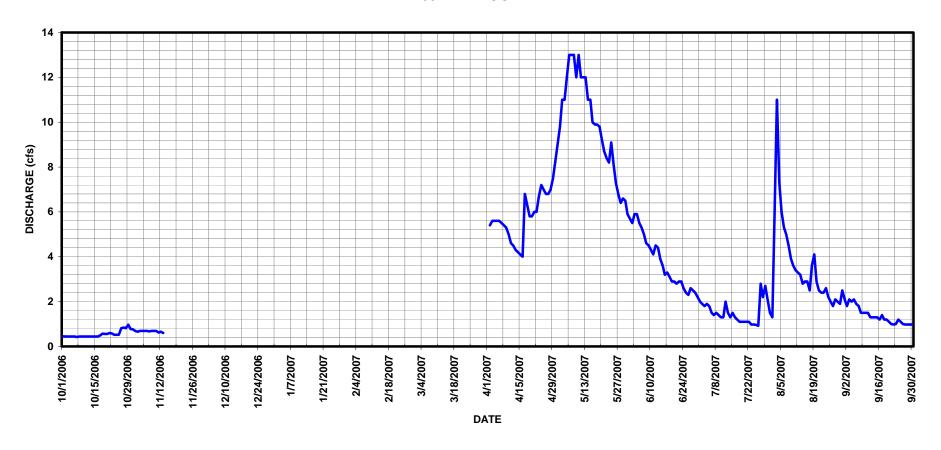
RATING TABLE. -- FISHESCO06 USED FROM 01-Oct-2006 TO 30-Sep-2007

MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	.69						9.0	5.7	2.0	1.3	2.1
2	.44	.66					5.4	9.8	5.5	1.9	5.8	1.8
3	.44	.69					5.6	11	5.9	1.8	11	2.1
4	.44	.69					5.6	11	5.9	1.9	7.3	2.0
5	.44	.69					5.6	12	5.5	1.8	6.0	2.1
6	.44	.69					5.6	13	5.3	1.5	5.3	1.9
7	.42	.67					5.5	13	5.0	1.4	5.0	1.8
8	.44	.69					5.4	13	4.6	1.5	4.5	1.5
9	. 44	.69					5.3	12	4.5	1.4	3.9	1.5
10	.44	.69					5.0	13	4.3	1.3	3.6	1.5
11	.44	.62					4.6	12	4.1	1.3	3.4	1.5
12	.44	.66					4.5	12	4.5	2.0	3.3	1.3
13	.44	.60					4.3	12	4.4	1.5	3.2	1.3
14	.44						4.2	11	3.9	1.3	2.8	1.3
15	.44						4.1	11	3.6	1.5	2.9	1.3
16	.44						4.0	10	3.2	1.3	2.9	1.2
17	.49						6.8	9.9	3.3	1.2	2.5	1.4
18	.57						6.3	9.9	3.1	1.1	3.6	1.2
19	.56						5.8	9.8	2.9	1.1	4.1	1.2
20	.56						5.8	9.2	2.9	1.1	2.9	1.1
21	.60						6.0	8.7	2.8	1.1	2.5	1.0
22	.58						6.0	8.4	2.9	1.1	2.4	.98
23	.52						6.7	8.2	2.9	.98	2.4	1.0
24	.52						7.2	9.1	2.6	.98	2.6	1.2
25	.52						7.0	8.1	2.4	.96	2.2	1.1
26	.81						6.8	7.3	2.3	.92	2.0	1.0
27	.84						6.8	6.8	2.6	2.8	1.8	.98
28	.81						7.0	6.4	2.5	2.2	2.1	.98
29	.97						7.5	6.6	2.4	2.7	2.0	.98
30	.78						8.2	6.5	2.2	2.1	1.9	.98
31	.76							5.9		1.5	2.5	
TOTAL	16.92	8.73					168.6	305.6	113.7	47.24	109.7	41.30
MEAN	.55	.67					5.81	9.86	3.79	1.52	3.54	1.38
AC-FT	34	17					334	606	226	94	218	82
MAX	.97	.69					8.2	13	5.9	2.8	11	2.1
MIN	.42	.60					4.0	5.9	2.2	.92	1.3	.98
CAL YR	2006	TOTAL	148.92 ME	AN	0.67 MAX	2	.4 MIN	_	AC-FT	295 (P	ARTTAL YE	AR RECORD)
WTR YR	2007	TOTAL	811.79 ME		3.59 MAX			-	AC-FT			AR RECORD)

MAX DISCH: 31.1 CFS AT 22:00 ON Aug. 2, 2007 GH 1.32 FT. SHIFT 0 FT. MAX GH: 1.32 FT. AT 22:00 ON Aug. 2, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06734500 FISH CREEK NEAR ESTES PARK CO WY2007 HYDROGRAPH



06735500 BIG THOMPSON RIVER (below Lake Estes) NEAR ESTES PARK, CO

LOCATION.--Lat 40°22'35", long 105°29'06", in NE4NE4 sec. 29, T.5 N., R.72 W., Larimer County, Hydrologic Unit 10190006, on right bank 100 ft upstream from Dry Gulch, 600 ft downstream from Olympus Dam, and 2.0 mi east of Estes Park.

DRAINAGE AREA.--155 mi<sup>2</sup>. Area at site used Jan. 29, 1934, to Mar. 21, 1951, 162 mi<sup>2</sup>.

GAGE. -- Graphic water-stage recorder and high data rate satellite monitoring Data Collection Platform (DCP) in a 4 ft x 4 ft precast concrete shelter and stilling well at a 15 foot concrete Parshall Flume with overflow bays flanking the flume. The Sutron 8210 DCP is equipped with a speech modem, for telephone access. The primary reference is an electric tape gage in the shelter with two supplementary outside staff gages. One supplementary staff is located in the Ha location of the flume and the second staff is located on the backside of the shelter. The second staff is used when the flumes' overflow bays are in use. On April 18, 2007 the chart recorder was removed and replaced with a Sutron Stage Discharge Recorder (SDR). The SDR serves as backup to the telemetered data collected by the shaft encoder. The gage is maintained in cooperation of the United States Bureau of Reclamation (USBR) and the Colorado Division of Water Resources (DWR).

REMARKS.--Primary record is hourly averages of 15-minute DCP data with chart and SDR as backup. Record is complete and reliable. The record is good. Record developed by Russell Stroud.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- BTBLESCO10 USED FROM 01-OCT-2006 TO 30-SEP-2007

			21001111		ME	AN VALUE	S	10 02112				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	40	24	30	18	27	99	97	124	128	155	134
2	44	38	21	30	19	28	93	116	127	128	144	146
3	45	31	21	29	19	27	97	100	123	130	138	81
4	44	30	21	29	18	27	96	101	126	128	228	83
5	44	29	23	29	18	26	88	103	126	128	204	84
6	45	29	22	29	18	26	86	100	128	128	162	83
7	45	29	22	30	18	26	89	99	127	127	167	81
8	43	30	21	29	18	26	82	100	141	128	168	82
9	43	31	20	28	18	26	85	100	129	128	192	83
10	48	30	22	28	18	26	88	100	127	128	174	88
11	49	31	24	28	18	26	87	100	128	128	146	79
12	50	31	23	30	18	26	56	99	128	254	132	76
13	49	31	22	30	20	26	45	99	127	242	132	78
14	50	30	21	30	23	26	41	102	127	139	120	68
15	49	31	20	30	22	27	44	104	127	130	111	68
16	42	31	20	30	23	27	47	124	129	129	129	48
17	42	31	21	25	22	35	51	124	127	127	145	47
18	34	31	21	25	22	35	62	127	126	128	121	46
19	33	31	30	25	21	35	74	129	126	128	115	49
20	34	31	30	25	24	35	67	126	127	126	146	49
21	33	32	29	25	25	40	64	128	127	126	138	55
22	30	30	29	25	25	45	68	128	128	128	118	57
23	27	28	29	25	25	45	67	124	129	129	111	55
24	30	28	29	25	26	51	72	123	131	145	104	53
25	43	29	29	25	25	78	82	125	124	145	107	52
26	50	29	30	25	25	68	54	125	127	158	105	51
27	51	29	30	25	25	78	50	127	126	201	92	51
28	50	25	30	25	27	74	51	125	128	194	84	51
29	53	25	30	24		75	48	125	130	213	87	51
30	53	25	30	18		105	51	125	129	185	95	52
31	50		30	19		100		125		170	97	
TOTAL	1349	906	774	830	598	1322	2084	3530	3829	4606	4167	2081
MEAN	43.5	30.2	25.0	26.8	21.4	42.6	69.5	114	128	149	134	69.4
AC-FT	2680	1800	1540	1650	1190	2620	4130	7000	7590	9140	8270	4130
MAX	53	40	30	30	27	105	99	129	141	254	228	146
MIN	27	25	20	18	18	26	41	97	123	126	84	46
CAL YR	2006	TOTAL	25806	MEAN	78.1 MAX	54	5 MIN	19	AC-FT	56540		

MAX DISCH: 309 CFS AT 17:30 ON Jul. 27, 2007 GH 2.85 FT. SHIFT 0 FT. MAX GH: 2.85 FT. AT 17:30 ON Jul. 27, 2007

71.4 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

26076 MEAN

WTR YR 2007

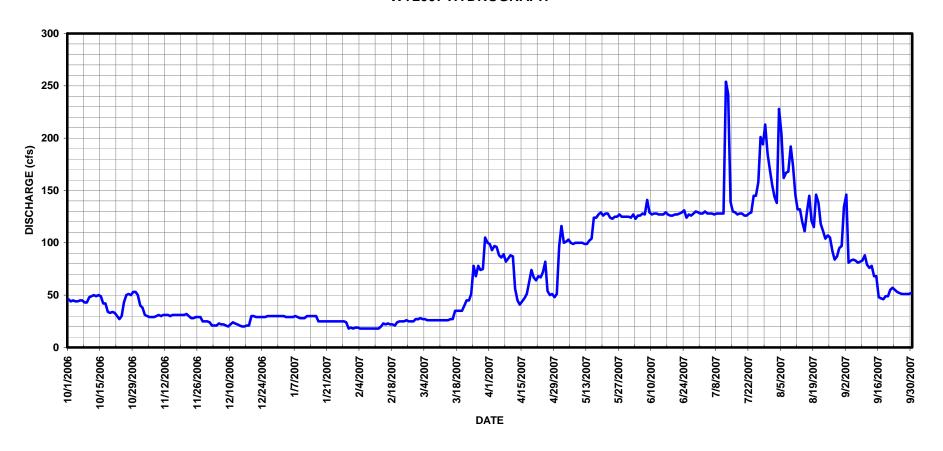
TOTAL

254 MIN

18 AC-FT

51720

# 06735500 BIG THOMPSON RIVER BELOW LAKE ESTES NEAR ESTES PARK CO WY2007 HYDROGRAPH



### 06734900 OLYMPUS TUNNEL (ESTES FOOTHILLS CANAL) AT LAKE ESTES, CO

LOCATION.--Lat 40°22'30", long 105°29'13", in SE⅓NW⅓ sec. 29, T.5 N., R.72 W., Larimer County, Hydrologic Unit 10190006, at tunnel entrance at south end of Olympus Dam on Lake Estes, 1.9 mi east of Estes Park.

GAGE.--Satellite monitoring high data rate Data Collection Platform (DCP) with a phone modem, incremental shaft encoder and a Sutron Stage Discharge Recorder (SDR) in a 4 foot by 4 foot concrete shelter at a 15.2 foot wide concrete canal section. The SDR was installed on December 15, 2006. The primary reference is an electric tape gage located in the shelter with a supplemental staff gage located on the left wall of the canal. This station is operated in cooperation of the Colorado Division of Water Resources (DWR) and the United States Bureau of Reclamation (USBR) as part of the Colorado-Big Thompson Project.

REMARKS.--Primary record is hourly averages of 15-minute DCP data with SDR data as back up. The record is complete and reliable, except for December 6 to 8, 2006, when the float tape slipped off the shaft encoder twice and the SDR had not yet been installed; and June 19, 2007 when the station instruments were shut off for installation of a new shaft encoder. Missing values were interpolated without loss of accuracy between good data points. Zero flow occurs at gage heights of 0.20 ft. or less due to well conditions. Zero flow was observed on November 27, 2006. The record is good. Station maintained by USBR and DWR personnel, and record developed by Russell Stroud.

RATING TABLE. -- OLYTUNCO07 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE	, IN CFS,		YEAR OCTOE EAN VALUES		TO SEPTEMBE	R 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	0	0	497	526	402	355	494	274	231	557	501
2	228	0	0	500	527	507	351	498	277	272	553	501
3	229	0	0	498	528	501	237	477	331	295	556	467
4	228	0	0	512	526	503	422	372	377	208	541	397
5	228	0	0	520	523	501	378	310	314	207	539	397
6	229	0	13	521	514	499	365	313	308	206	542	404
7	229	0	32	520	512	500	362	349	395	204	548	400
8	225	0	133	512	514	511	361	347	393	204	551	399
9	229	0	6.4	502	514	526	359	302	355	205	483	392
10	264	0	85	509	514	521	367	256	358	206	503	399
11	337	0	298	503	514	520	362	318	258	210	452	399
12	354	0	433	501	515	524	497	413	339	214	405	411
13	351	0	530	503	513	524	512	421	390	212	472	504
14	268	0	541	503	471	528	520	386	354	229	547	517
15	253	0	509	511	443	507	516	414	357	230	553	507
16	246	0	498	479	442	505	416	403	397	328	554	502
17	158	0	495	416	436	512	504	399	354	524	553	504
18	158	0	501	482	443	516	507	406	445	556	553	482
19	178	0	499	504	344	516	502	404	349	553	551	543
20	160	0	498	499	91	516	503	402	302	550	548	479
21	134	0	495	505	104	521	504	403	283	552	550	508
22	94	0	501	500	93	514	502	403	350	554	550	513
23	18	0	510	503	89	514	500	399	303	551	549	546
24	0	0	510	511	158	520	502	409	353	550	544	549
25	0	0	514	512	491	518	502	374	356	551	549	486
26	0	0	517	510	500	521	438	327	317	548	550	452
27	0	0	503	515	257	517	431	279	253	552	547	451
28	0	0	504	513	254	517	432	277	207	546	529	482
29	0	0	506	519		452	431	278	205	548	414	547
30	0	0	504	518		401	492	278	204	539	308	483
31	0		501	522		375		276		552	440	
TOTAL	5022	0	10636.4	15620	11356	15509	13130	11387	9758	11887	16091	14122
MEAN	162	0	343	504	406	500	438	367	325	383	519	471
MEAN AC-FT	9960	0			22520	30760	26040		325 19350	23580	31920	28010
MAX	354	0	541	522	528	528	520	498	445	23580 556	31920 557	28010 549
MIN	0	0	0	416	89	375	237	256	204	204	308	392
TI IN	U	U	U	410	OÐ	3/3	231	230	∠∪4	204	300	332

MAX DISCH: 571 CFS AT 10:30 ON Sep. 5, 2007 GH 8.18 FT. SHIFT 0 FT. MAX GH: 8.18 FT. AT 10:30 ON Sep. 5, 2007

400 MAX 369 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

TOTAL 146160.4 MEAN TOTAL 134518.4 MEAN

CAL YR 2006

WTR YR 2007

556 MIN

557 MIN

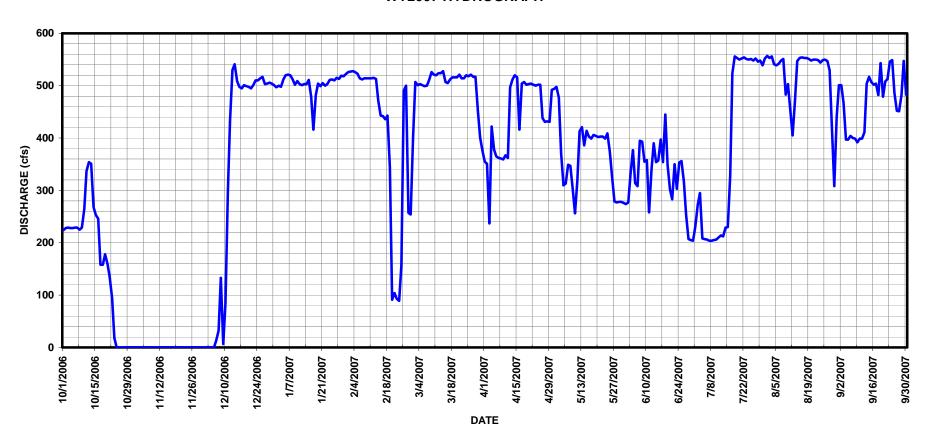
0 AC-FT

0 AC-FT

289900

266800

# 06734900 OLYMPUS TUNNEL (ESTES FOOTHILLS CANAL) AT LAKE ESTES CO WY2007 HYDROGRAPH



## 06736000 NORTH FORK BIG THOMPSON RIVER AT DRAKE, CO

**LOCATION.**—Lat  $40^{\circ}20'45"$ , long  $105^{\circ}26'30"$ , NW4 sec. 3, T.5 N., R.71 W., Larimer County, 400 ft upstream from mouth at Drake, Co. on U. S. Highway 34 to Estes Park, Co.

DRAINAGE AREA AND PERIOD OF RECORD. -- 85.1 mi<sup>2</sup>; 1947 to present.

GAGE.--Graphic water-stage recorder and High Data Rate DCP logger with shaft encoder in a 42-inch well. The electric drop tape is the primary reference with a supplemental outside chain gage as backup.

REMARKS.—The primary record is hourly averages of 15-minute data transmitted by the DCP, with chart record as back up. The record is complete and reliable, except for October 31, November 1-2, 5, 10-12, 2006, when the stage-discharge relationship affected by ice; November 13, 2006 to March 21, 2007, when the gage was shut off for winter; no gage-height record is available; and, May 27-29, August 7, 2007, when the inlets were plugged. The record is good, except during periods of no gage height and ice affected record, which are poor; and during periods of inlet plugging, which are fair. Station maintained and record developed by Russell Stroud.

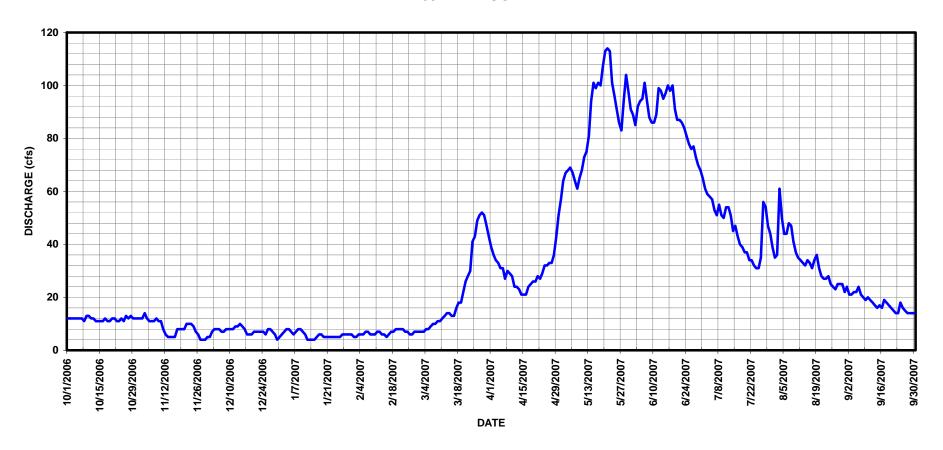
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE.--BTNFDRCO11 USED FROM 01-OCT-2006 TO 30-SEPT-2007

			210011		ME	AN VALUES	211 2000	10 02111				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	5.0	6.0	5.0	7.0	39	57	89	65	35	24
2	12	12	7.0	7.0	5.0	7.0	36	64	85	61	36	21
3	12	14	8.0		6.0	7.0	34	67	92	59	61	21
4	12	12	8.0		6.0	8.0	33	68	94	58	50	22
5	12	11	8.0		6.0	8.0	31	69	95	57	44	22
6	12	11	7.0		7.0	9.0	31	67	101	53	44	24
7	12	11	7.0		7.0	10	27	64	94	51	48	21
8	11	12	8.0		6.0	10	30	61	88	55	47	20
9	13	11	8.0		6.0	11	29	65	86	51	41	19
10	13	11	8.0		6.0	11	28	68	86	50	37	20
11	12	8.0	8.0		7.0	12	24	73	89	54	35	19
12	12	6.0	9.0		7.0	13	24	75	99	54	34	18
13	11	5.0	9.0		6.0	14	23	81	98	51	33	17
14	11	5.0	10		6.0	14	21	94	95	45	32	16
15	11	5.0	9.0		5.0	13	21	101	97	47	34	17
16	11	5.0	8.0		6.0	13	21	99	100	43	33	16
17	12	8.0	6.0		7.0	16	24	101	98	40	31	19
18	11	8.0	6.0		7.0	18	25	100	100	39	34	18
19	11	8.0	6.0		8.0	18	26	107	91	37	36	17
20	12	8.0	7.0		8.0	22	26	113	87	37	31	16
21	12	10	7.0		8.0	26	28	114	87	34	28	15
22	11	10	7.0		8.0	28	27	113	86	34	27	14
23	11	10	7.0		7.0	30	29	101	84	32	27	14
24	12	9.0	7.0		7.0	41	32	96	81	31	28	18
25 26	11	7.0	6.0		6.0	43	32 33	91 86	78 76	31 35	25 24	16 15
	13	6.0	8.0		6.0	49	33	83	76 77		23	
27 28	12 13	4.0	8.0 7.0		7.0 7.0	51 52	33 36	94	73	56 54	23 25	14 14
20 29	12	4.0	6.0		7.0	51	43	104	70	47	25	14
30	12	5.0	4.0			47	43 51	98	68	4 7	25	14
31	12	5.0	5.0			47	21	90		39	22	
ЭŢ	1.2		3.0	0.0		43		91		39	22	
TOTAL	366	252.0	224.0	181.0	183.0	702.0	897	2665	2644	1444	1055	535
MEAN	11.8	8.40	7.23	5.84	6.54	22.6	29.9	86.0	88.1	46.6	34.0	17.8
AC-FT	726	500	444		363	1390	1780	5290	5240	2860	2090	1060
MAX	13	14	10	8.0	8.0	52	51	114	101	65	61	24
MIN	11	4.0	4.0		5.0	7.0	21	57	68	31	22	14
CAL YR	2006	TOTAL	5826.3	MEAN	16.0 MAX	101	MIN	3	AC-FT	11560		
	2007	TOTAL	11148		30.5 MAX	114			AC-FT	22110		
								-				

MAX DISCH: 121 CFS AT 00:30 ON May. 20, 2007 GH 4.44 FT. SHIFT 0.01 FT. MAX GH: 4.44 FT. AT 00:30 ON May. 20, 2007

# 06736000 NORTH FORK BIG THOMPSON RIVER AT DRAKE CO WY2007 HYDROGRAPH



## DILLE TUNNEL (EAST PORTAL) NEAR DRAKE, CO

LOCATION.--Lat 40°25'10", long 105°14'45", NW4NW4 sec. 9, T.5 N., R.70 W., Larimer County. Diverts water from Big Thompson River and Transmountain diversions from Colorado River basin to Hansen Feeder Canal.

GAGE.--Steven's Type A graphical water-stage recorder and satellite monitoring Data Collection Platform (DCP) in a concrete shelter and well at a 8-foot concrete Parshall Flume. The Steven's recorder was removed and replaced with a Sutron Stage Discharge Recorder (SDR) on March 23, 2007. The primary reference gage is an electric tape gage located within the shelter. There is no supplemental gage. The station is maintained by Northern Colorado Water Conservancy District (NCWCD), United States Bureau of Reclamation (USBR), and Colorado Division of Water Resources (DWR) personnel.

REMARKS.--The primary record is hourly averages of 15-minute DCP data with chart and SDR data used as backup. Base gage and instruments are checked daily when tunnel is in operation by NCWCD personnel. The record is complete and reliable. The chart recorder and encoder do not achieve zero stage, presumably due to the stilling well inlet installation. Therefore, zero discharge is determined operationally, and confirmed by visits by NCWCD and DWR personnel and USBR water orders. Record is good. Flow at station is intermittent dependent on river flows, water orders, and other regulations. Station maintained and record developed by Russell Stroud.

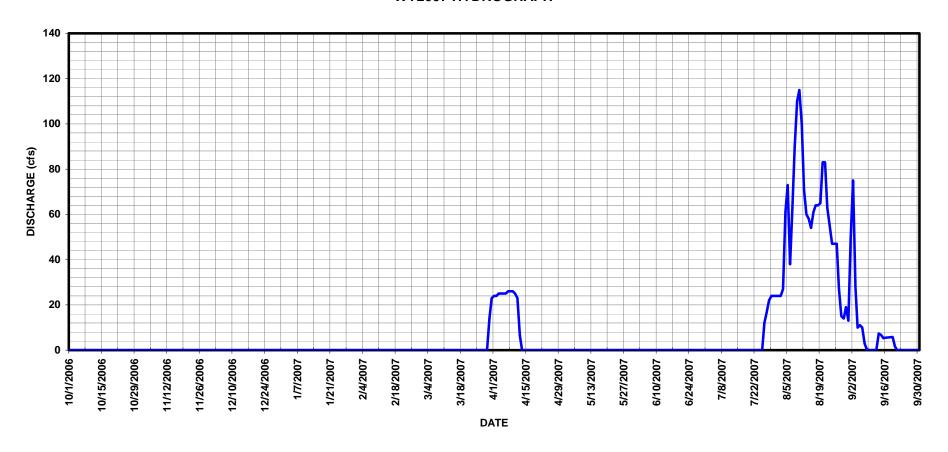
RATING TABLE.--STD08FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	24	0	0	0	24	49
2	0	0	0	0	0	0	24	0	0	0	24	75
3	0	0	0	0	0	0	25	0	0	0	27	28
4	0	0	0	0	0	0	25	0	0	0	61	10
5	0	0	0	0	0	0	25	0	0	0	73	11
6	0	0	0	0	0	0	25	0	0	0	38	10
7	0	0	0	0	0	0	26	0	0	0	62	2.9
8	0	0	0	0	0	0	26	0	0	0	90	0
9	0	0	0	0	0	0	26	0	0	0	110	0
10	0	0	0	0	0	0	25	0	0	0	115	0
11	0	0	0	0	0	0	23	0	0	0	100	0
12	0	0	0	0	0	0	6.5	0	0	0	71	0
13	0	0	0	0	0	0	0	0	0	0	60	7.3
14	0	0	0	0	0	0	0	0	0	0	58	6.8
15	0	0	0	0	0	0	0	0	0	0	54	5.3
16	0	0	0	0	0	0	0	0	0	0	61	5.5
17	0	0	0	0	0	0	0	0	0	0	64	5.6
18	0	0	0	0	0	0	0	0	0	0	64	5.7
19	0	0	0	0	0	0	0	0	0	0	65	5.8
20	0	0	0	0	0	0	0	0	0	0	83	1.6
21	0	0	0	0	0	0	0	0	0	0	83	0
22 23	0	0	0	0	0	0	0	0	0	0	63 55	0
24	0	0	0	0	0	0	0	0	0	0	47	0
25	0	0	0	0	0	0	0	0	0	0	47	0
26	0	0	0	0	0	0	0	0	0	12	47	0
27	0	0	0	0	0	0	0	0	0	17	27	0
28	0	0	0	0	0	0	0	0	0	22	15	0
29	0	0	0	0		0	0	0	0	24	14	0
30	0	0	0	0		14	0	0	0	24	19	0
31	0		0	0		23		Ö		24	13	
01	Ü		Ü	Ü		20		· ·				
TOTAL	0	0	0	0	0	37	280.5	0	0	123	1734	229.5
MEAN	0	0	0	0	0	1.19	9.35	0	0	3.97	55.9	7.65
AC-FT	0	0	0	0	0	73	556	0	0	244	3440	455
MAX	0	0	0	0	0	23	26	0	0	24	115	75
MIN	0	0	0	0	0	0	0	0	0	0	13	0
CAL YR	2006	TOTAL	11640.7 MEAN		31.9 MAX	384		0	AC-FT	23090		
WTR YR	2007	TOTAL	2404 MEAN		6.59 MAX	115	5 MIN	0	AC-FT	4770		

MAX DISCH: 118 CFS AT 08:45 ON Aug. 9, 2007 GH 2.25 FT. SHIFT 0 FT. MAX GH: 2.25 FT. AT 08:45 ON Aug. 9, 2007

# DILLE TUNNEL (EAST PORTAL) NEAR DRAKE CO WY2007 HYDROGRAPH



## 06738000 BIG THOMPSON RIVER AT MOUTH OF CANYON, NEAR DRAKE, CO

LOCATION.--Lat 40°25'18", long 105°13'34", in SW4sW4 sec. 3, T,5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, on right bank at mouth of canyon, 400 ft upstream from Handy Ditch diversion dam, and 6.0 mi east of Drake.

DRAINAGE AREA AND PERIOD OF RECORD. -- 305 mi2; 1927-1933, 1938 to present.

GAGE.--Steven's Type A graphical water-stage recorder and satellite monitoring Data Collection Platform (DCP) with incremental shaft encoder in a 5-foot by 6-foot pre-cast concrete shelter at concrete control section. The chart recorder and shaft encoder are activated by a Stacom manometer. An outside wire-weight is used as base gage. The gage is used by United States Bureau of Reclamation (USBR), Northern Colorado Water Conservancy District (NCWCD), Colorado Division of Water Resources (DWR) and Home Supply Ditch personnel.

REMARKS.--The primary record is hourly averages of 15-minute satellite data with chart back up. The chart does not operate independently from the DCP, but chart data are used to fill in when the DCP data are missed for any reason, or if the encoder slips its chain drive from the manometer. The record is complete, reliable, and good, except as follows: November 1-3, 11-16, 18-20, 2006, when the stage discharge relationship affected by ice. Record is estimated and fair. November 8 and 17, 2006, when the manometer stage was determined to be in error (unknown cause). Record is estimated and fair. November 22, 2006 to March 15, 2007, when the station was closed for winter. No gage-height record. Record is estimated and poor. Partial day record on November 22, 2006 and March 15, 2007. Record is estimated and fair. May 30 to June 1, 2007, when the nitrogen regulator failed and manometer readings are questionable. Record is fair. September 1-3, 10-12, 2007, when the manometer failed. Both DCP and chart records were erroneous. Record is estimated and poor. Station maintained and record developed by Russell Stroud.

RATING TABLE. -- BTCANYCO16 USED FROM 01-OCT-2006 TO 30-SEPT-2007

DISCHARGE,	IN CFS,	WATER YEAR	OCTOBER	2006	ТО	SEPTEMBER	2007
		MEAN	VALUES				

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	50	29	36	23	34	121	132	209	176	158	85
2	51	45	28	37	24	35	113	167	209	169	145	76
3	49	45	29	37	25	34	110	164	223	170	165	77
4	48	42	29	37	24	35	110	160	220	171	187	78
5	50	38	31	36	24	34	103	178	220	168	175	77
6	51	37	29	35	25	35	96	183	232	164	164	78
7	50	36	29	37	25	36	93	178	224	160	141	85
8	50	38	29	37	24	36	91	169	222	166	115	80
9	51	40	28	36	24	37	92	172	212	161	109	80
10	54	39	30	35	24	37	93	171	210	155	94	83
11	54	37	32	34	25	38	90	175	209	157	82	82
12	54	35	32	34	25	39	85	183	225	256	91	82
13	55	35	31	34	26	40	73	186	225	279	99	75
14	55	37	31	34	29	40	64	204	218	191	89	69
15	55	35	29	34	27	41	65	220	219	154	87	69
16	52	35	28	35	29	41	67	225	226	151	91	59
17	50	39	27	31	29	44	80	235	220	146	100	50
18	47	37	27	31	29	53	88	233	225	148	97	51
19	42	37	36	30	29	56	97	244	214	147	87	50
20	44	37	37	30	32	57	95	253	205	144	80	55
21	42	39	36	30	33	62	93	248	204	139	77	57
22	41	40	36	30	33	68	93	254	208	141	81	59
23	39	38	36	30	32	75	94	231	203	139	76	60
24	39	37	36	30	33	107	103	226	203	152	80	65
25	44	36	35	30	31	128	112	218	192	154	78	59
26	59	35	38	30	31	132	99	214	195	155	76	56
27	57	33	38	31	32	134	90	212	195	207	84	56
28	59	29	37	31	34	137	93	223	192	235	89	57
29	58	29	36	30		135	91	241	187	213	94	57
30	59	30	34	24		135	104	230	182	204	90	56
31	56		35	25		126		216		176	94	
TOTAL	1568	1120	998	1011	781	2041	2798	6345	6328	5348	3275	2023
MEAN	50.6	37.3	32.2	32.6	27.9	65.8	93.3	205	211	173	106	67.4
AC-FT	3110	2220	1980	2010	1550	4050	5550	12590	12550	10610	6500	4010
MAX	59	50	38	37	34	137	121	254	232	279	187	85
MIN	39	29	27	24	23	34	64	132	182	139	76	50
CAL YR	2006	TOTAL	20193	MEAN	55.3 MAX	40	)2 MIN	23	AC-FT	40050		

MAX DISCH: 338 CFS AT 12:15 ON May. 29, 2007 GH 3.25 FT. SHIFT 0 FT. MAX GH: 3.25 FT. AT 12:15 ON May. 29, 2007

92.2 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

33636 MEAN

WTR YR 2007

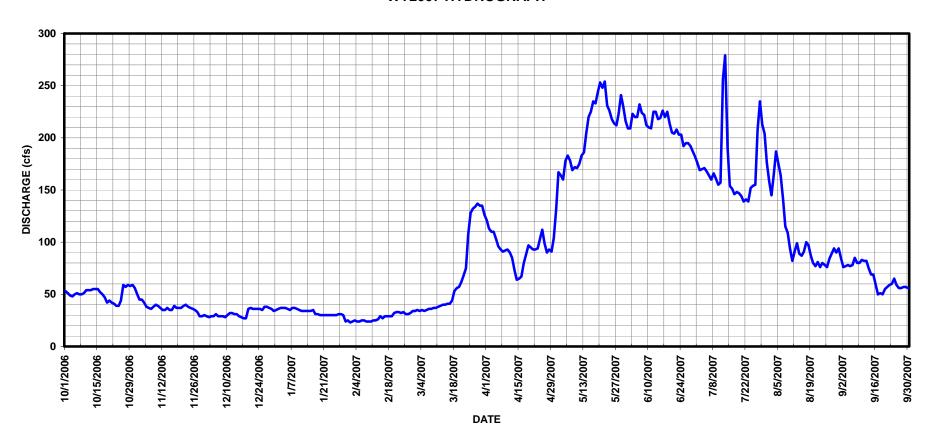
TOTAL

279 MIN

23 AC-FT

66720

# 06738000 BIG THOMPSON RIVER AT MOUTH OF CANYON, NEAR DRAKE CO WY2007 HYDROGRAPH



### BUCKHORN CREEK NEAR MASONVILLE, CO

LOCATION.--Lat 40°26'04", long 105°10'47", just downstream from Larimer County Road 24H bridge over Buckhorn

DRAINAGE AREA. -- 140 mi<sup>2</sup>.

GAGE.--A-35 Stevens recorder and Data Collection Platform (DCP) with shaft encoder in a wooden shelter and stilling well. Primary reference gage is an electric tape gage inside the shelter.

REMARKS.--The primary record is hourly averages of 15-minute satellite data with chart back up. Daily maximum and minimum stages for the satellite record checked to within +0.02 ft. with the chart. The record is complete and reliable, except for for January 13-17, 2007, when the station was shut down due to ice, and December 20-21, 2006, and February 1-3, 2007, which were ice affected.. The record is good, except for periods of no gage height and ice affected record, which are estimated and rated poor to fair. Station maintained and record developed by Mark Simpson.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

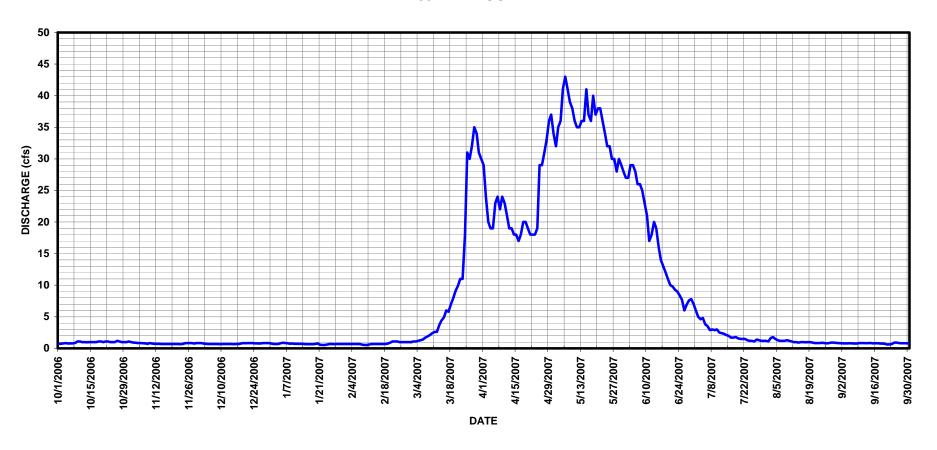
RATING TABLE. -- BUCRMYCO07 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	1	MEAN VALUE	ES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	.98	.83	.69	.68	.98	29	34	27	5.9	1.1	.82
2	.74	.92	.75	.69	.68	1.1	24	32	27	5.0	1.6	.79
3	.79	.89	.72	.69	.68	1.1	20	35	29	4.6	1.8	.79
4	.83	.83		.82	.68	1.2	19	36	29	4.8	1.5	.78
5	.77	.83	.68	.88	.68	1.3	19	41	28	3.8	1.3	.80
6	.78	.82	.68	.83	.68	1.4	23	43	26	3.5	1.2	.79
7	.79	.78	.68	.80	.68	1.7	24	41	26	2.9	1.2	.77
8	.86	.70		.74	.57	1.9	22	39	25	3.0	1.2	.77
9	1.1	.83		.77	.53	2.1	24	38	23	2.9	1.3	.83
10	1.1	.75		.70	.53	2.4	23	36	21	3.0	1.2	.84
11	.98	.71		.72	.61	2.6	21	35	17	2.5	1.1	.83
12	.98	.71		.72	.68	2.6	19	35	18	2.4	1.0	.80
13	.97	.71		.70	.68	3.7	19	36	20	2.3	.99	.83
14	.98	.68	.68	.68	.68	4.4	18	36	19	2.1	.92	.83
15	.98	.68	.67	.67	.68	4.9	18	41	16	2.0	1.0	.79
16	.98	.68	.68	.66	.69	6.0	17	37	14	1.7	1.0	.82
17	1.0	.69	.68	.65	.68	5.8	18	36	13	1.7	.97	.81
18	1.1	.68	.75	.65	.68	7.0	20	40	12	1.8	1.0	.76
19	1.1	.68	.83	.72	.77	7.9	20	37	11	1.6	1.0	.77
20	1.0	.68		.77	.92	9.1	19	38	10	1.5	.90	.72
21	1.1	.68	.83	.55	1.1	9.9	18	38	9.8	1.5	.83	.62
22	1.1	.67		.53	1.1	11	18	36	9.3	1.5	.83	.64
23	.98	.68	.83	.53	1.1	11	18	34	9.0	1.3	.83	.68
24	.98	.82		.60	1.0	18	19	32	8.4	1.2	.89	.90
25	.98	.83		.68	1.0	31	29	32	7.7	1.2	.83	.90
26	1.2	.83		.68	.98	30	29	30	6.0	1.1	.78	.83
27	1.1	.83		.67	.98	32	31	30	6.9	1.4	.83	.82
28	.98	.77		.68	1.0	35	33	28	7.6	1.3	.92	.81
29	.98	.83		.68		34	36	30	7.8	1.2	.91	.82
30	1.0	.83		.68		31	37	29	7.0	1.2	.85	.79
31	1.1		.75	.68		30		28		1.2	.83	
TOTAL	30.03	23.00	23.07	21.51	21.72	342.08	684	1093	490.5	73.1	32.61	23.75
MEAN	.97	.77	.74	.69	.78	11.0	22.8	35.3	16.4	2.36	1.05	.79
AC-FT	60	46	46	43	43	679	1360	2170	973	145	65	47
MAX	1.2	.98	.84	.88	1.1	35	37	43	29	5.9	1.8	.90
MIN	.70	.67		.53	.53	.98	17	28	6.0	1.1	.78	.62
CAL YR	2006	TOTAL	448 MEAN	1.23	3 MAX	4.20	MIN	0.44 AC	-FT	889		
WTR YR	2007	TOTAL	2860 MEAN	7.83	3 MAX	43.0	MIN	0.53 AC	-FT	5670		

MAX DISCH: 46.9 CFS AT 09:15 ON May. 15, 2007 GH 5.49 FT. SHIFT -0.08 FT. MAX GH: 5.49 FT. AT 09:15 ON May. 15, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# BUCKHORN CREEK NEAR MASONVILLE CO WY2007 HYDROGRAPH



## CHARLES HANSEN FEEDER CANAL BELOW BIG THOMPSON SIPHON NEAR DRAKE, CO

LOCATION. -- Lat 40°25'20", long 105°13'33", SW4SW4 sec. 3, T.5 N., T.70 W., Larimer County.

GAGE. -- Steven's A-35 continuous water-stage recorder and a high data rate 8210 data collection platform (DCP) with shaft encoder in a 4 ft x 4 ft pre-cast concrete shelter and concrete well. An electric tape gage is the primary reference with no supplemental staff gage. AC power is available at the gage and heaters are used to keep the stilling well from freezing in winter months. Station is maintained in cooperation with the State of Colorado Division of Water Resources (DWR), United States Bureau of Reclamation (USBR) and Northern Colorado Water Conservancy District (NCWCD). This gage is part of the Colorado Big Thompson (C-BT) project. The Steven's A-35 was removed on March 30, 2007 and replaced with a Sutron Stage Discharge Recorder (SDR).

REMARKS.--The primary record is hourly averages of 15-minute DCP data with chart and SDR record as backup. The record is complete and reliable, except for January 12-16 and 21, 2007, when the stilling well was frozen. The record is good, except the periods when the stilling well froze, which is estimated and fair. Station maintained and record developed by Russell Stroud.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

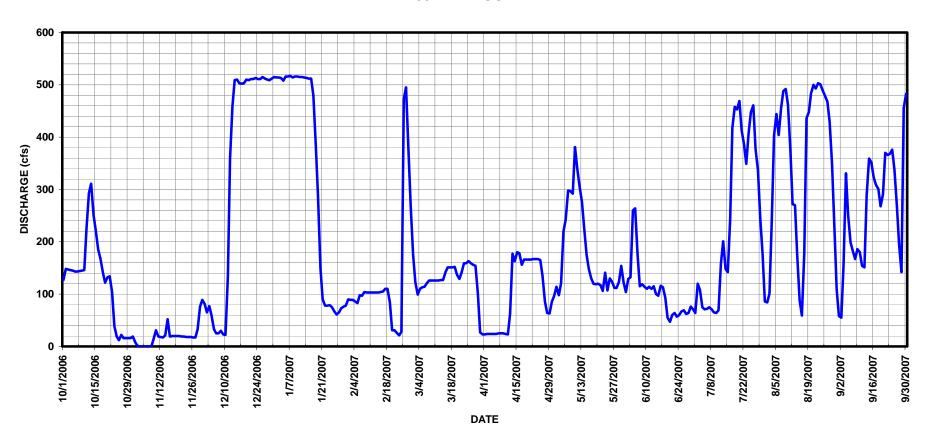
RATING TABLE.--HFCBBSCO17 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	AN VALUES	3					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	7.9	81	514	90	176	23	97	104	64	84	58
2	148	1.1	65	514	89	123	24	114	129	120	101	55
3	147	0	77	513	89	99	24	98	132	108	242	156
4	146	0	59	508	86	110	24	121	260	75	403	331
5	145	0	33	516	83	113	24	220	264	71	444	251
6	143	0	25	516	98	114	24	243	176	72	404	199
7	143	0	25	517	97	121	25	298	115	75	455	183
8	144	0	30	514	104	126	25	297	119	71	488	167
9	145	15	23	516	103	126	25	292	114	65	492	186
10	146	31	22		103	126	24	381	110	64	462	180
11	226	19	134	515	103	126	23	339	114	69	377	154
12	293	18	359	515	103	126	63	306	110	158	272	151
13	311	17	459	514	103	127	177	276	115	201	270	290
14	251	21	509	513	103	127	163	226	100	148	173	359
15	221	52	510	512	104	142	180	175	97	142	88	352
16	185	19	503	512	105	151	178	148	116	245	59	323
17	168	20	502	479	110	151	156	130	113	418	179	309
18	142	20	503	384	110	151	166	120	93	458	436	301
19	122	20	510	286	84	152	166	119	55	453	448	268
20	132	20	509	150	31	137	166	120	47	469	484	291
21	134	19	511		31	129	166	117	60	413	500	370
22	103	19	511		26	141	167	106	64	386	493	366
23	39	18	513		21	159	167	141	57	349	503	368
24	19	18	511	79	28	159	167	107	60	409	501	376
25	12	18	511	75	473	163	165	130	67	448	489	338
26	22	17	515	67	495	159	135	124	69	461	479	270
27	16	17	512		376	156	86	112	62	377	468	195
28	16	33	510	65	269	154	64	112	64	337	429	142
29	16	76	509	73		101	63	124	76	247	349	456
30	16	89	512	76		27	85	154	71	176	234	483
31	19		515	78		23		122		86	109	
TOTAL	3897	605.0	10568	10344	3617	3995	2945	5469	3133	7235	10915	7928
MEAN	126	20.2	341	334	129	129	98.2	176	104	233	352	264
AC-FT	7730	1200	20960	20520	7170	7920	5840	10850	6210	14350	21650	15730
MAX	311	89	515	517	495	176	180	381	264	469	503	483
MIN	12	0	22	61	21	23	23	97	47	64	59	55
CAL YR	2006	TOTAL	71474	MEAN	196 MAX	515	5 MIN	0	AC-FT	141800		
WTR YR	2007	TOTAL	70651		194 MAX	517		0	AC-FT	140100		

MAX DISCH: 521 CFS AT 16:15 ON Dec. 26, 2006 GH 6.47 FT. SHIFT 0 FT. MAX GH: 6.47 FT. AT 16:15 ON Dec. 26, 2006

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# CHARLES HANSEN FEEDER CANAL BELOW BIG THOMPSON SIPHON NEAR DRAKE CO WY2007 HYDROGRAPH



06738100 CHARLES HANSEN FEEDER CANAL WASTEWAY TO BIG THOMPSON NEAR DRAKE, CO

LOCATION.--Lat 40°25'11", long 105°13'30", NE4NW4 sec. 10, T.5 N., R.70 W., Larimer County.

GAGE.--Incremental shaft encoder and weather station connected to a high data rate Data Collection Platform (DCP) in a 4 ft x 4 ft precast concrete shelter and concrete well at a 15-foot modified concrete Parshall Flume. An electric drop tape located in the shelter serves as the primary reference with a supplemental outside staff gage located on the left wing-wall. AC power is available on site. On April 19, 2007 a Sutron Stage Discharge Recorder (SDR) was installed as backup. Data are also transmitted to a Supervisory Control And Data Acquisition (SCADA) system via 4-20 mA output to the Loveland Control Center (LCC). This gage is operated in cooperation with Colorado Division of Water Resources (DWR), United States Bureau of Reclamation (USBR) and Northern Colorado Water Conservancy District (NCWCD) as part of the Colorado Big Thompson (C-BT) project.

REMARKS.--The primary record is hourly averages of 15-minute DCP data with the SDR data as backup. The record is complete and reliable, except for the following periods: October 9-11, 2006, due to DCP failure. USBR provided accounting average discharge values used from SCADA. December 12-18, 2006, due to erroneous gage-height values assumed to be due to ice in the stilling well. USBR accounting shows no flow during this period and gage-height values are below 0.06 feet of stage. February 17, 24, March 9-12, April 7, 2007, missing data values interpolated from surrounding good data. USBR accounting showed no flow during this period. Two hourly values on June 13, 2007 are erroneous. Both the DCP and SDR suffered a failure. Values were interpolated from surrounding good record. May 13 July 11 August 3, 4, 31, 2007, when daily maximum/minimum between DCP and SDR record showed disagreement. Values were edited to the greater/lesser value without loss of accuracy since the average gage-heights agreed. Disagreement is due to the sampling interval and the rapid rise and fall nature of this structure. The waste way serves as both a safety valve and delivery system returning water back to the Big Thompson River. Record is good. Station maintained by NCWCD, USBR, and DWR personnel, and record developed by Russell Stroud.

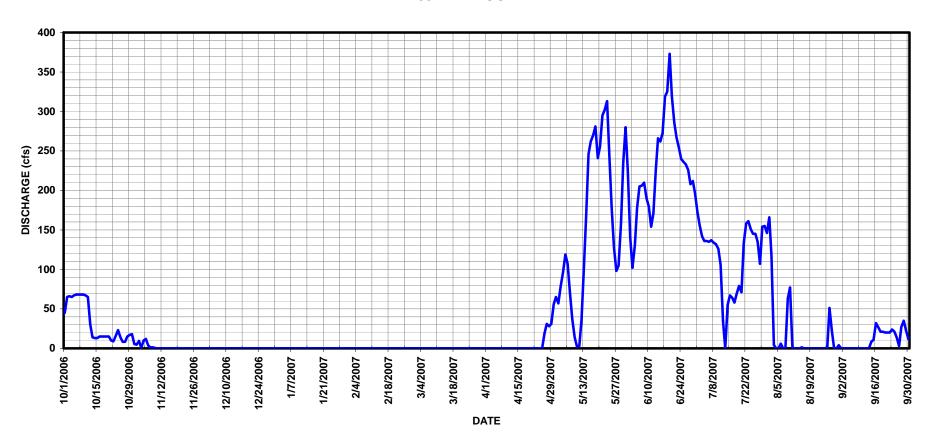
RATING TABLE. -- HFCWASCO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE,	ΙN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007	
			N	/EAN V	/ALUES					

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	4.6	0	0	0	0	0	65	225	173	166	0
2	65	9.4	0	0	0	0	0	57	141	156	117	0
3	66	.72	0	0	0	0	0	78	102	142	4.2	0
4	65	9.9	0	0	0	0	0	96	130	136	0	0
5	67	12	0	0	0	0	0	119	178	136	0	0
6	68	3.7	0	0	0	0	0	107	205	135	5.9	0
7	68	1.2	0	0	0	0	0	69	206	137	0	0
8	68	1.2	0	0	0	0	0	37	210	134	0	0
9	68	.46	0	0	0	0	0	14	190	132	63	0
10	67	0	0	0	0	0	0	2.5	180	126	77	0
11	65	0	0	0	0	0	0	3.1	154	106	0	0
12	30	0	0	0	0	0	0	37	171	35	0	0
13	14	0	0	0	0	0	0	104	226	0	0	0
14	13	0	0	0	0	0	0	169	266	55	0	8.3
15	13	0	0	0	0	0	0	246	262	67	1.2	11
16	15	0	0	0	0	0	0	262	273	64	0	32
17	15	0	0	0	0	0	0	270	319	58	0	27
18	15	0	0	0	0	0	0	281	325	70	0	21
19	15	0	0	0	0	0	0	241	373	79	0	21
20	15	0	0	0	0	0	0	256	319	71	0	20
21	10	0	0	0	0	0	0	295	286	133	0	20
22	8.9	0	0	0	0	0	0	302	267	158	0	20
23	16	0	0	0	0	0	0	313	254	161	0	24
24	23	0	0	0	0	0	0	245	240	151	0	21
25	14	0	0	0	0	0	0	177	236	145	0	14
26	8.4	0	0	0	0	0	19	128	233	145	0	3.1
27	8.4	0	0	0	0	0	31	98	226	135	51	27
28	15	0	0	0	0	0	28	105	208	107	22	35
29	17	0	0	0		0	31	158	212	154	0	23
30	18	0	0	0		0	56	235	196	155	0	12
31	5.4		0	0		0		280		146	3.9	
TOTAL	1001.1	43.18	0	0	0	0	165	4849.6	6813	3602	511.2	339.4
MEAN	32.3	1.44	0	0	0	0	5.50	156	227	116	16.5	11.3
AC-FT	1990	86	0	0	0	0	327	9620	13510	7140	1010	673
MAX	68	12	0	0	0	0	56	313	373	173	166	35
MIN	5.4	0	0	0	0	0	0	2.5	102	0	0	0
CAL YR	2006	TOTAL 37:	11.48 ME <i>A</i>	AN :	10.2 MAX	396	MIN	0	AC-FT	7360		
WTR YR	2007	TOTAL 173	24.48 MEA	AN .								

MAX DISCH: 398 CFS AT 10:00 ON Jun. 19, 2007 GH 3.22 FT. SHIFT 0 FT. MAX GH: 3.22 FT. AT 10:00 ON Jun. 19, 2007

# 06738100 CHARLES HANSEN FEEDER CANAL WASTEWAY TO BIG THOMPSON NEAR DRAKE CO WY2007 HYDROGRAPH



# 06738100 CHARLES HANSEN FEEDER CANAL POWER PLANT TO BIG THOMPSON RIVER NEAR DRAKE, CO

LOCATION.--Lat 40°25'15", long 105°13'30", NE4NW4 sec. 10, T.5 N., R.70 W., Larimer County.

GAGE.--Graphic discharge recorder and 8210 Data Collection Platform (DCP) connected to a flow meter directly connected to the power turbine. The graphic recorder was not put into use this year as per agreement with the Colorado Division of Water Resources (DWR) and the United States Bureau of Reclamation (USBR). This gage is operated in cooperation of DWR and USBR personnel.

REMARKS.--The primary record is fifteen minute discharge data reported by the ultrasonic flow meter which is collected by the DCP. The record is complete and reliable, except for November 7, 2006 to April 17, 2007, when the power plant and DCP were shut off for the winter and two hourly values on August 6, 2007, of unknown cause. The record is good. On July 30 and 31, 2007, attempts to start generation occurred. Hourly computed discharge for these attempts were zeroed as no confirmable amount of water actually passed the gage and the record for these days is considered fair. In agreement with DWR and USBR, the gage will continue to transmit over the winter while the power plant is offline. Station maintained by USBR and record developed by Russell Stroud.

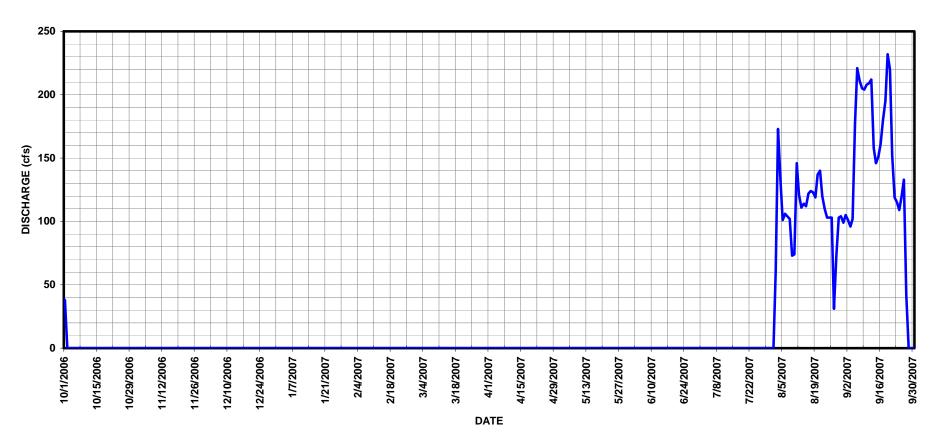
RATING TABLE. -- STCONVERT USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	0	0	0	0	0	0	0	0	0	0	105
2	0	0	0	0	0	0	0	0	0	0	61	101
3	0	0	0	0	0	0	0	0	0	0	173	96
4	0	0	0	0	0	0	0	0	0	0	133	102
5	0	0	0	0	0	0	0	0	0	0	101	177
6	0	0	0	0	0	0	0	0	0	0	106	221
7	0	0	0	0	0	0	0	0	0	0	104	211
8	0	0	0	0	0	0	0	0	0	0	102	205
9	0	0	0	0	0	0	0	0	0	0	73	204
10	0	0	0	0	0	0	0	0	0	0	74	208
11	0	0	0	0	0	0	0	0	0	0	146	209
12	0	0	0	0	0	0	0	0	0	0	121	212
13	0	0	0	0	0	0	0	0	0	0	111	158
14	0	0	0	0	0	0	0	0	0	0	114	146
15	0	0	0	0	0	0	0	0	0	0	112	151
16	0	0	0	0	0	0	0	0	0	0	122	161
17	0	0	0	0	0	0	0	0	0	0	124	180
18	0	0	0	0	0	0	0	0	0	0	123	195
19	0	0	0	0	0	0	0	0	0	0	119	232
20	0	0	0	0	0	0	0	0	0	0	137	220
21	0	0	0	0	0	0	0	0	0	0	140	152
22	0	0	0	0	0	0	0	0	0	0	120	119
23	0	0	0	0	0	0	0	0	0	0	110	115
24	0	0	0	0	0	0	0	0	0	0	103	109
25	0	0	0	0	0	0	0	0	0	0	103	120
26	0	0	0	0	0	0	0	0	0	0	103	133
27	0	0	0	0	0	0	0	0	0	0	31	42
28	0	0	0	0	0	0	0	0	0	0	73	0
29	0	0	0	0		0	0	0	0	0	103	0
30	0	0	0	0		0	0	0	0	0	104	0
31	0		0	0		0		0		0	99	
TOTAL	38	0	0	0	0	0	0	0	0	0	3245	4284
MEAN	1.23	0	0	0	0	0	0	0	0	0	105	143
AC-FT	75	0	0	0	0	0	0	0	0	0	6440	8500
MAX	38	0	0	0	0	0	0	0	0	0	173	232
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR	2006	TOTAL	30429 MEAN		83.4 MAX	396		0	AC-FT	60360		
WTR YR	2007	TOTAL	7567 MEAN	1	20.7 MAX	232	MIN	0	AC-FT	15010		

MAX DISCH: 256 CFS AT 19:30 ON Sep. 19, 2007

# 06738100 CHARLES HANSEN FEEDER CANAL POWER PLANT TO BIG THOMPSON RIVER NEAR DRAKE CO WY2007 HYDROGRAPH



## BOULDER CREEK FEEDER CANAL NEAR LYONS, CO

LOCATION.--Lat 40°12'58", long 105°15'28", NE4NW4 sec. 20, T.3 N., R.70 W., Boulder County.

DRAINAGE AREA. -- N/A

GAGE.--Steven's Type A graphical chart recorder and an incremental shaft encoder connected to a high data rate data collection platform (DCP) in a 6 ft x 8 ft concrete shelter at a 10 ft concrete Parshall Flume. The primary reference is an electric tape gage located in the shelter with a supplemental staff located at the H<sub>a</sub> location on the right wing wall. The gage is operated in cooperation with Northern Colorado Water Conservancy District (NCWCD) and the State of Colorado Division of Water Resources (DWR).

REMARKS.--The primary record is the hourly averages of 15-minute DCP data with chart backup. The record is complete and reliable. The record is good. Water was delivered by NCWCD personnel October 1-31, 2006 and April 10, 2007 to September 30, 2007. November 1, 2006 to April 9, 2007 the station was off for the winter and no deliveries were made. Station maintained by NCWCD and DWR personnel and record developed by Russell Stroud.

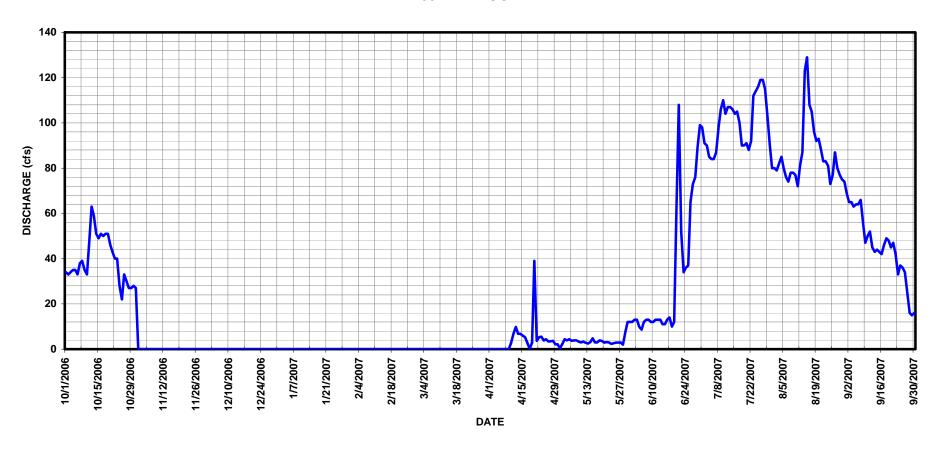
RATING TABLE.--BFCLYOCO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	.21	0	0	0	0	0	.40	12	98	80	69
2	33	0	0	0	0	0	0	2.3	13	91	79	65
3	34	0	0	0	0	0	0	4.4	13	90	82	65
4	35	0	0	0	0	0	0	3.9	9.9	85	85	63
5	35	0	0	0	0	0	0	4.4	8.6	84	80	64
6	33	0	0	0	0	0	0	3.7	12	84	76	64
7	38	0	0	0	0	0	0	3.9	13	87	74	66
8	39	0	0	0	0	0	0	3.9	13	98	78	56
9	35	0	0	Ö	0	Ō	0	3.3	12	106	78	47
10	33	0	0	Ō	0	0	2.7	3.0	12	110	77	50
11	47	0	0	0	0	0	6.8	3.3	13	104	72	52
12	63	0	0	0	0	0	9.8	2.8	13	107	81	45
13	59	0	0	0	0	0	6.8	2.5	13	107	87	43
14	51	0	0	Ö	0	0	6.8	3.1	11	106	123	44
15	49	0	0	Ō	0	0	6.0	4.8	11	104	129	43
16	51	Õ	0	Ö	0	0	5.3	3.0	13	105	108	42
17	50	0	0	0	0	0	2.7	3.0	14	100	105	46
18	51	0	0	0	0	0	.12	3.9	10	90	96	49
19	51	Õ	0	0	Ö	0	2.9	3.6	12	90	92	48
20	46	0	0	0	0	0	39	2.9	64	91	93	45
21	43	Õ	0	0	0	0	3.7	3.1	108	88	88	47
22	40	0	0	0	0	0	5.3	3.0	52	92	83	42
23	40	0	0	Ō	0	0	5.5	2.3	34	112	83	33
24	28	0	0	0	0	0	3.8	2.6	36	114	81	37
25	22	0	0	Ō	0	0	4.4	2.9	37	116	73	36
26	33	0	0	Ö	0	Ō	3.4	2.9	65	119	77	34
27	30	0	0	0	0	0	3.5	3.0	73	119	87	25
28	27	0	0	0	0	0	3.7	2.0	76	115	80	16
29	27	0	0	Ö		Ō	2.1	7.6	89	103	77	15
30	28	0	0	Ō		0	2.1	12	99	90	75	16
31	27		0	0		0		12		80	74	
TOTAL	1212	.21	0	0	0	0	126.42	119.50	961.5	3085	2653	1367
MEAN	39.1	.007	0	0	0	0	4.21	3.85	32.0	99.5	85.6	45.6
AC-FT	2400	. 4	0	0	0	0	251	237	1910	6120	5260	2710
MAX	63	.21	0	0	0	0	39	12	108	119	129	69
MIN	22	0	0	0	0	0	0	.40	8.6	80	72	15
CAL YR	2006	TOTAL 171	29.71 MEAN		46.9 MAX	18	37 MIN	0	AC-FT	33980		
WTR YR	2007	TOTAL 95	24.63 MEAN		26.1 MAX	12	29 MIN	0	AC-FT	18890		

MAX DISCH: 157 CFS AT 16:45 ON Aug. 14, 2007 GH 2.34 FT. SHIFT 0 FT. MAX GH: 2.34 FT. AT 16:45 ON Aug. 14, 2007

# BOULDER CREEK FEEDER CANAL NEAR LYONS CO WY2007 HYDROGRAPH



## ST. VRAIN SUPPLY CANAL NEAR LYONS, CO

LOCATION.--Lat 40°13'05", long 105°15'35", NE\%NV\% sec. 20, T.3 N., R.70 W., Boulder County.

DRAINAGE AREA. --N/A

GAGE.--Steven's type A graphical water-stage recorder, satellite monitoring data collection platform (DCP) and two incremental shaft encoders in a 36-inch corrugated metal pipe shelter and stilling well at a concrete 15-foot Parshall Flume. An electric tape gage located in the shelter is the base gage with a supplemental staff located on the right wing wall at the H<sub>a</sub> location. The gage is operated in cooperation with Northern Colorado Water Conservancy District (NCWCD) and the State of Colorado Division of Water Resources (DWR).

REMARKS.--The primary record is hourly averages of 15-minute DCP data with chart as backup. The record is complete and reliable, except for: zero flow on October 31, (22:00-23:00) and November 1 to 7, 2006 was found to be residual water in the stilling well as supported by the November 7<sup>th</sup> observation of zero flow. Flows with gage-height values below 0.09 feet were set to zero. The canal was in use from October 1-31, 2006, and from April 10, 2007 through the end of the water year. The DCP and graphical chart recorder are disabled when the canal is not in use. The record is good. Station maintained by NCWCD personnel and record developed by Russell Stroud.

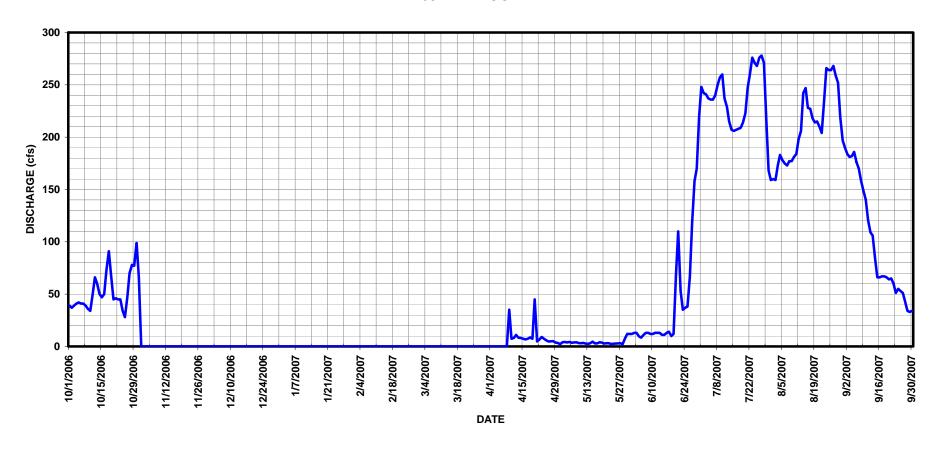
RATING TABLE. -- SVSLYOCO05 USED FROM 01-OCT-2006 TO 30-SEP-2007

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	0	0	0	0	0	0	2.1	12	248	160	190
2	37	0	0	0	0	0	0	4.0	13	242	159	184
3	39	0	0	0	0	0	0	4.3	13	241	173	181
4	41	0	0	0	0	0	0	3.8	9.7	237	183	182
5	42	0	0	0	0	0	0	4.3	8.4	236	178	186
6	41	0	0	0	0	0	0	3.5	11	236	175	176
7	41	0	0	0	0	0	0	3.8	13	240	173	170
8	39	0	0	0	0	0	0	3.9	13	250	177	158
9	36	0	0	0	0	0	35	3.2	12	257	177	149
10	34	0	0	0	0	0	7.4	3.0	12	260	181	140
11	49	0	0	0	0	0	8.1	3.3	13	237	184	121
12	66	0	0	0	0	0	11	2.7	13	229	198	109
13	60	0	0	0	0	0	8.2	2.5	13	215	206	106
14	50	0	0	0	0	0	8.1	3.1	11	207	242	84
15	47	0	0	0	0	0	7.4	4.6	11	206	247	66
16	50	0	0	0	0	0	6.7	2.9	13	207	228	66
17	73	0	0	0	0	0	7.3	2.9	14	208	227	67
18	91	0	0	0	0	0	8.5	3.9	10	209	218	67
19	68	0	0	0	0	0	7.3	3.6	12	214	214	66
20	45	0	0	0	0	0	45	2.8	68	223	215	64
21	46	0	0	0	0	0	4.8	3.1	110	247	210	65
22	45	0	0	0	0	0	6.6	3.0	53	261	204	60
23	45	0	0	0	0	0	9.0	2.3	35	276	235	51
24	34	0	0	0	0	0	7.3	2.6	37	271	266	55
25	28	0	0	0	0	0	5.8	2.8	38	268	264	53
26	47	0	0	0	0	0	4.8	2.9	67	276	264	51
27	70	0	0	0	0	0	4.9	3.0	118	278	268	43
28	78	0	0	0	0	0	5.1	2.1	158	271	259	34
29	77	0	0	0		0	3.6	7.6	170	219	252	33
30	99	0	0	0		0	3.4	12	219	168	219	34
31	66		0	0		0		12		159	197	
TOTAL	1623	0	0	0	0	0	215.3	121.6	1300.1	7296	6553	3011
MEAN	52.4	0	0	0	0	0	7.18	3.92	43.3	235	211	100
AC-FT	3220	0	0	0	0	0	427	241	2580	14470	13000	5970
MAX	99	0	0	0	0	0	45	12	219	278	268	190
MIN	28	0	0	0	0	0	0	2.1	8.4	159	159	33
CAL YR	2006	TOTAL	28600 MEAN		78.4 MAX	29:	2 MIN	0	AC-FT	56730		
WTR YR	2007	TOTAL	20120 MEAN		55.1 MAX	27		0	AC-FT	39910		

MAX DISCH: 288 CFS AT 01:30 ON Jul. 27, 2007 GH 2.62 FT. SHIFT 0 FT. MAX GH: 2.62 FT. AT 01:30 ON Jul. 27, 2007

# ST. VRAIN SUPPLY CANAL NEAR LYONS CO WY2007 HYDROGRAPH



### LITTLE THOMPSON RIVER AT CANYON MOUTH NEAR BERTHOUD, CO

LOCATION.--Lat 40°15′29″, long 105°12′21″, SW4NW4 sec. 2, T. 3 N., 70 W., Boulder County, on the left bank, at the mouth of the Canyon, 1800 ft. upstream from the Culver Ditch Diversion and 8.5 mi. southwest of Berthoud, Co.

DRAINAGE AREA AND PERIOD OF RECORD.--100 mi<sup>2</sup>; 1962-1969, 1993 to present.

GAGE.--Graphic water stage recorder and digital shaft encoder with satellite monitoring in a 42" metal shelter and well. A drop tape is the primary reference gage.

REMARKS.--The primary record is hourly averages of 15-minute satellite data with chart as back up. Good chart data were used April 6-8, 2007 with no loss of accuracy. On April 20, 2007 at 13:10, inlets were closed for flushing and left closed. At 09:00 on April 21, 2007 the inlets were re-opened. Interpolation between good record was used to fill in this period with no loss of accuracy, since very little change occurred during the hours of missing record. The station was closed for winter from November 16, 2006 through March 04, 2007. The record is considered good. This gage is a partial year station that is closed in the winter months. Station maintained and record developed by Lee Cunning.

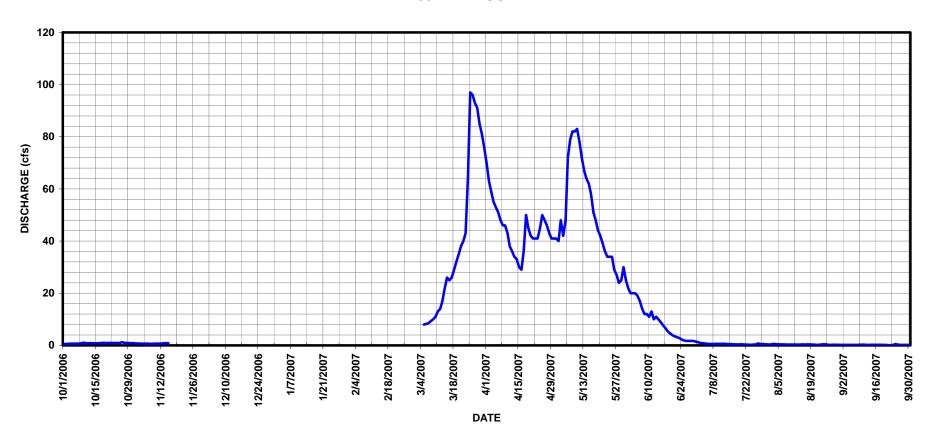
RATING TABLE.--LTCANYCO12 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	AF	PR	N	IAY	JUN		JUL	AUG	SEP
1	.51	.76					7	70		41	22		1.3	.30	.18
2	.56	.73					6	53		40	20		.91	.49	.16
3	.59	.70					5	59		48	20		.84	.57	.16
4	.65	.68					5	55		42	20		.71	.42	.16
5	.67	.66				8.0	5	53		48	19		.62	.37	.18
6	.66	.66				8.2	5	51		72	17		.58	.36	.19
7	.69	.64				8.5	4	18		79	14		.58	.37	.17
8	.71	.63				9.3	4	16		82	12		.58	.32	.16
9	.96	.65				10	4	16		82	12		.59	.28	.18
10	.97	.67				11	4	13		83	11		.57	.32	.28
11	.81	.66				13	3	88		78	13		.60	.31	.25
12	.86	.72				14	3	36		72	10		.60	.31	.19
13	.86	.78				17	3	34		67	11		.56	.29	.19
14	.82	.87				22	3	33		64	10		.51	.28	.23
15	.81	.87				26	3	30		62	8.9		.49	.34	.23
16	.81					25	2	29		58	7.7		.43	.33	.18
17	.91					26	3	36		51	6.6		.36	.35	.23
18	.97					29		50		48	5.4		.34	.34	.21
19	.95					32		15		44	4.6		.39	.33	.19
20	.95					35		12		42	3.9		.41	.28	.17
21	.96					38		11		39	3.5		.33	.20	.08
22	.95					40		11		36	3.1		.29	.22	.07
23	.93					43		11		34	2.8		.26	.33	.10
24	.90					65		15		34	2.3		.26	.41	.51
25	.89					97		50		34	1.9		.28	.35	.31
26	1.2					96		18		29	1.7		.35	.27	.21
27	.98					93		16		27	1.7		.75	.20	.18
28	.94					91		13		24	1.7		.52	.26	.18
29	.90					85		11		25	1.7		.47	.24	.17
30	.88					81		11		30	1.5		.41	.25	.17
31	.86					76				25			.36	.21	
TOTAL	26.11	10.68				1099.0	134			540	270.0		6.25	9.90	5.87
MEAN	.84	.71				40.7	44.			9.7	9.00		.52	.32	.20
AC-FT	52	21				2180	267		30	)50	536		32	20	12
MAX	1.2	.87				97		70		83	22		1.3	.57	.51
MIN	.51	.63				8.0	2	29		24	1.5		.26	.20	.07
CAL YR	2006	TOTAL	222 MEAN	0.91	MAX	7.10	MIN		0.19	AC-FT		440	(PARTIAL	YEAR	RECORD)
WTR YR	2007	TOTAL	4320 MEAN	16.9	MAX	97	MIN		.07	AC-FT		8570	(PARTIAL	YEAR	RECORD)

MAX DISCH: 101 CFS AT 00:15 ON Mar. 25, 2007 GH 3.82 FT. SHIFT -0.13 FT. MAX GH: 3.82 FT. AT 00:15 ON Mar. 25, 2007

# LITTLE THOMPSON RIVER AT CANYON MOUTH NEAR BERTHOUD CO WY2007 HYDROGRAPH



## 06744000 BIG THOMPSON RIVER AT MOUTH NEAR LA SALLE, CO

LOCATION.--Lat 40°21'00", long 104°47'04", in SW1/4, SE1/4, Sec. 33, T.5N., R.66 W., Weld County, CO, on left bank just southeast of gage on Evans Town Ditch, 0.7 miles upstream from bridge on WCR 396, 1.6 miles upstream from mouth and 4 miles West of LaSalle, CO.

DRAINAGE AREA AND PERIOD OF RECORD. -- 828 mi<sup>2</sup>; 1951 to present.

GAGE.--Sutron High Data Rate (HDR) data collection platform, digital shaft encoder, and a graphic chart recorder in a wooden shelter with galvanized well section. A drop tape is the primary reference gage. The supplemental outside chain gage is unreliable. A new SatLink DCP was installed October 13, 2006.

REMARKS.--The primary record is hourly averages of 15-minute satellite data with chart backup. Daily maximum and minimum stages for the satellite record agreed within ±0.02 ft of the chart. The record is complete. There were numerous days with missing transmitted values throughout WY. Missing data replaced with good chart data with no loss of accuracy. This problem was corrected when the DCP UTC offset was changed from -13 to -14 on August 24, 2007. The record is reliable, except for the following periods: December 20-24, 31, 2006, January 1, 2, 12-16, 26, 2007, when ice affected the stage-discharge relationship; January 17-25, 2007, when the well was frozen. The record is good, except during periods of no gage height and ice affected record, which are estimated and poor. Station maintained by Div. 1 Hydrographic Staff and record developed by Lee Cunning.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- BIGLASCO25 USED FROM 01-OCT-2006 TO 30-SEP-2007

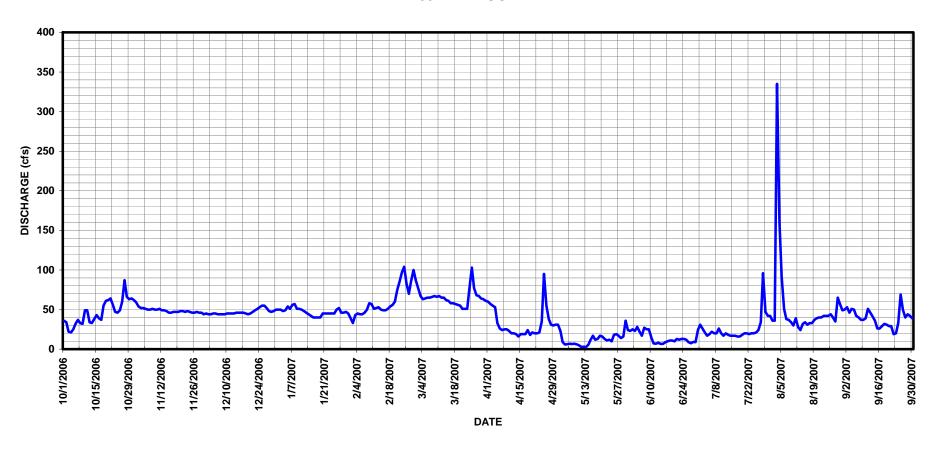
					MEAN	N VALUES			
ΑY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	59	45	50	39	87	60	31	23	31	36	50
2	34	54	44	50	33	77	57	23	25	26	36	53
3	22	52	44	48	43	67	55	8.8	23	21	335	46
4	21	52	45	49	45	63	53	5.8	28	17	161	51
5	25	51	45	54	44	64	33	6.2	22	19	91	50
6	32	50	44	51	44	65	26	6.8	17	22	51	42
7	37	50	44	56	46	65	24	6.5	27	20	38	40
8	33	51	44	57	50	66	25	6.9	25	20	37	37
9	32	50	44	51	58	67	25	6.0	25	26	34	37
10	49	50	45	51	57	66	23	4.8	15	20	30	39
11	49	51	45	50	51	67	20	2.9	7.3	17	39	51
12	34	49	45	48	52	65	20	3.0	6.9	20	28	46
13	33	49	45	46	53	65	19	2.6	8.1	18	24	41
14	38	48	46	44	50	62	16	5.7	6.6	17	32	36
15	43	46	46	42	49	61	19	12	6.7	17	34	26
16	39	46	46	40	49	58	19	17	8.5	17	31	26
17	37	47	46	40	51	58	19	12	10	16	33	29
18	55	47	45	40	54	57	24	13	11	16	33	32
19	61	47	44	40	56	56	18	17	11	18	37	31
20	62	48	45	45	60	55	21	16	9.9	20	39	29
21	64	48	47	45	75	51	20	13	13	20	40	29
22	56	47	49	45	85	51	20	11	12	19	40	19
23	47	48	51	45	97	51	21	12	13	20	42	20
24	46	47	53	45	104	77	35	10	13	20	42	33
25	49	46	55	45	83	103	95	18	12	21	42	69
26	60	46	55	50	70	77	55	19	8.8	24	44	50
27	87	47	52	52	86	68	38	17	7.5	34	40	40
28	66	46	48	46	100	67	31	14	9.1	96	35	44
29	63	46	47	46		64	30	16	8.8	47	65	42
30	64	44	48	47		63	31	36	24	42	57	39
31	62		50	45		61		24		42	49	
TOTAL	1436	1462	1452	1463	1684	2024	952	397.0	437.2	783	1675	1177
MEAN	46.3	48.7	46.8	47.2	60.1	65.3	31.7	12.8	14.6	25.3	54.0	39.2
AC-FT	2850	2900	2880	2900	3340	4010	1890	787	867	1550	3320	2330
MAX	87	59	55	57	104	103	95	36	28	96	335	69
MIN	21	44	44	40	33	51	16	2.6	6.6	16	24	19

CAL YR 2006 TOTAL 12575.5 MEAN 34.5 MAX 87 MIN 1.8 AC-FT 24950 WTR YR 2007 TOTAL 14942.2 MEAN 40.9 MAX 335 MIN 2.6 AC-FT 29640

MAX DISCH: 623 CFS AT 06:20 ON Aug. 3, 2007 GH 3.52 FT. SHIFT 0 FT. MAX GH: 3.52 FT. AT 06:20 ON Aug. 3, 2007

# 06744000 BIG THOMPSON RIVER AT MOUTH NEAR LA SALLE CO WY2007 HYDROGRAPH



06752000 CACHE LA POUDRE RIVER AT MOUTH OF CANYON, NEAR FORT COLLINS, CO

LOCATION.--Lat 40°39'52", long 105°13'26", in NW4 sec. 15, T.8 N., R.70 W., Larimer County, Hydrologic Unit 10190007, on left bank at mouth of canyon, 0.5 mi downstream from headgate of Poudre Valley Canal, 1.2 mi upstream from Lewistone Creek, and 9.3 mi northwest of courthouse in Fort Collins.

DRAINAGE AREA AND PERIOD OF RECORD.--1,056 mi<sup>2</sup>. Sporadic and somewhat unreliable data from June 1881 to Aug. 1883. Reliable data from Oct. 1883 to current year. Periodic water-quality data from 1962 to 1995.

GAGE.--Stevens F-type water stage recorder, shaft encoder, and satellite monitoring equipment (Satlink logger
with speech card) in a concrete shelter and stilling well. There is a supplemental chain gage.

REMARKS.--The primary record is hourly averages of 15-minute satellite data with chart as backup. Satellite mean gage heights checked with chart values to within ±0.02 ft. The record is complete and reliable, except for the following periods: November 29, 2006 - February 23, 2007, when the station was closed for the winter; and February 25-27, March 1 - 4, 2007, when the stage-discharge relationship was affected by ice. The record is good, except during the winter shutdown period, which was estimated and poor; and during periods of ice affected record, which are estimated and fair. Station maintained and record developed by Lee Cunning.

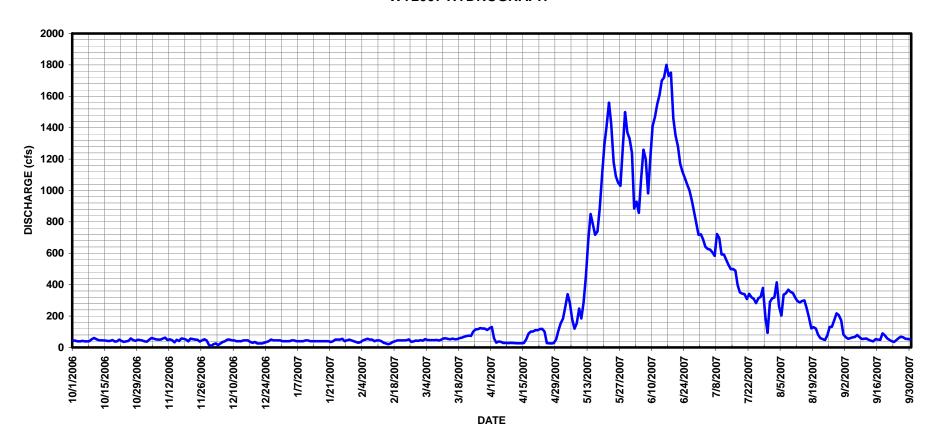
RATING TABLE. -- CLAFTCCO11 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	39	20	40	35	46	130	152	1240	721	313	83
2	42	37	25	40	30	43	58	183	885	687	318	65
3	39	49	15	40	35	53	31	257	929	641	415	55
4	39	60	25	45	45	48	38	339	857	627	263	59
5	42	56	35	45	50	46	36	282	1070	624	203	64
6	39	51	40	40	55	47	29	181	1260	605	336	66
7	39	50	50	40	50	46	29	119	1200	583	345	80
8	40	50	50	40	50	48	28	154	982	723	368	65
9	52	57	45	40	40	44	29	248	1210	696	354	54
10	60	62	45	45	45	49	29	185	1410	592	347	55
11	53	47	40	45	45	57	28	284	1470	591	318	57
12	46	52	40	40	40	58	27	459	1550	559	296	48
13	45	46	40	40	30	54	26	677	1610	527	286	43
14	45	33	45	40	25	52	26	850	1700	498	296	39
15	44	49	45	40	20	56	29	786	1720	499	300	53
16	41	41	45	40	25	52	50	718	1800	489	250	50
17	42	57	35	40	35	53	88	739	1730	398	193	49
18	47	55	30	40	40	59	101	885	1750	351	121	90
19	38	50	35	40	45	62	102	1100	1460	343	129	77
20	39	39	25	40	45	68	110	1290	1350	339	120	58
21	50	56	25	35	45	72	110	1410	1280	308	81	48
22	41	53	25	40	45	75	117	1560	1170	341	59	40
23	36	50	30	50	46	73	118	1420	1120	320	53	35
24	39	49	35	50	51	101	100	1180	1080	309	47	46
25	42	38	40	50	36	115	28	1090	1040	282	79	59
26	57	45	50	55	39	116	26	1050	1000	314	130	68
27	47	52	45	40	44	123	25	1030	940	322	132	64
28	42	45	45	45	42	120	28	1260	867	379	174	55
29	49	15	45	50		120	51	1500	789	199	217	54
30 31	47	10	45 40	45 40		111	106	1370	718	93	206 173	51
31	44		40	40		121		1330		291	1/3	
TOTAL	1371	1393	1155	1320	1133	2188	1733	24088	37187	14251	6922	1730
MEAN	44.2	46.4	37.3	42.6	40.5	70.6	57.8	777	1240	460	223	57.7
AC-FT	2720	2760	2290	2620	2250	4340	3440	47780	73760	28270	13730	3430
MAX	60	62	50	55	55	123	130	1560	1800	723	415	90
MIN	36	10	15	35	20	43	25	119	718	93	47	35
CAL YR	2006	TOTAL	74302 N	1EAN	203 MAX	1610	O MIN	9	AC-FT	147370		
WTR YR	2007	TOTAL	94471 N	MEAN	259 MAX	1800	O MIN	10	AC-FT	187400		

MAX DISCH: 2010 CFS AT 04:30 ON Jun. 16, 2007 GH 4.78 FT. SHIFT -0.13 FT. MAX GH: 4.78 FT. AT 04:30 ON Jun. 16, 2007

# 06752000 CACHE LA POUDRE RIVER AT MOUTH OF CANYON NEAR FORT COLLINS CO WY2007 HYDROGRAPH



## 06752500 CACHE LA POUDRE RIVER NEAR GREELEY, CO

LOCATION.--Lat 40°25'04", long 104°39'22", in NW4 sec. 11, T.5 N., R.65 W., Weld County, Hydrologic Unit 10190007, on right bank 15 ft. downstream from highway bridge, 2.9 mi east of courthouse in Greeley, and 3.0 mi upstream from mouth.

DRAINAGE AREA. -- 1,877 mi<sup>2</sup>.

WTR YR 2007

TOTAL

GAGE.--Stevens A-35 water stage recorder and satellite monitoring DCP with shaft encoder in a 48-inch metal shelter and well. The primary reference gage is a wire weight gage on the bridge above the station, and some distance from the inlets. Elevation of gage is 4,610 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Primary record is taken from the hourly averages of 15-minute satellite data with chart record as backup. Record is complete and reliable, except for January 13 - February 20, 2007, when the well was frozen. The record is fair, because of channel conditions in the vicinity of the gage, and poor during periods of no gage height record (well frozen). Station maintained and record developed by Lee Cunning.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE.--CLAGRECO26 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	MI	EAN VALUE	S					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	226	83	66	72	94	65	66	56	49	42	46
2	89	117	78	62	72	94	70	48	53	71	52	57
3	83	101	78	67	73	104	102	40	47	59	282	51
4	78	89	80	76	73	148	86	50	47	41	238	49
5	78	84	79	75	74	151	81	82	47	47	108	52
6	83	80	91	66	74	122	79	44	43	43	77	53
7	85	77	89	74	75	86	76	26	42	39	61	44
8	83	86	91	73	75	82	76	21	43	39	65	38
9	94	87	95	76	74	80	76	25	42	47	63	36
10	98	87	90	77	74	79	79	28	28	55	54	58
11	132	84	88	77	74	117	72	37	37	51	50	62
12	117	84	80	75	74	140	66	32	43	60	41	60
13	95	87	78	82	72	142	72	33	45	53	43	57
14	86	87	77	85	70	176	68	48	48	46	49	58
15	85	84	80	84	72	171	59	42	48	45	51	61
16	83	89	84	82	80	186	65	35	48	43	59	63
17	91	83	83	82	90	182	70	34	47	37	54	66
18	97	83	82	84	100	138	99	29	47	35	55	68
19	94	87	86	79	110	96	143	26	48	41	53	78
20	101	85	88	73	120	82	152	29	47	42	57	80
21	96	82	73	67	123	69	113	37	49	33	53	82
22	98	82	86	62	140	83	83	40	47	27	49	80
23	111	83	80	63	148	87	76	34	47	29	49	82
24	97	76	78	70	148	136	172	40	43	22	48	108
25	94	80	75	71	132	126	207	29	46	18	49	131
26	128	81	76	72	99	94	99	2.5	47	22	47	114
27	173	83	74	73	95	81	67	25	48	29	46	105
28	142	79	76	73	95	74	44	36	56	51	45	101
29	178	82	57	72		74	47	39	63	47	40	104
30	249	86	63	71		75	68	60	58	48	39	105
31	253		67	71		75		64		47	43	
TOTAL	3455	2701	2485	2280	2578	3444	2632	1204	1410	1316	2062	2149
MEAN	111	90.0	80.2	73.5	92.1	111	87.7	38.8	47.0	42.5	66.5	71.6
AC-FT	6850	5360	4930	4520	5110	6830	5220	2390	2800	2610	4090	4260
MAX	253	226	95	85	148	186	207	82	63	71	282	131
MIN	78	76	57	62	70	69	44	21	28	18	39	36
CAL YR	2006	TOTAL	25345	MEAN	69.4 MAX	25	3 MIN	26	AC-FT	50280		

MAX DISCH: 480 CFS AT 19:45 ON Aug. 3, 2007 GH 4.23 FT. SHIFT -0.95 FT. MAX GH: 4.23 FT. AT 19:45 ON Aug. 3, 2007

75.9 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

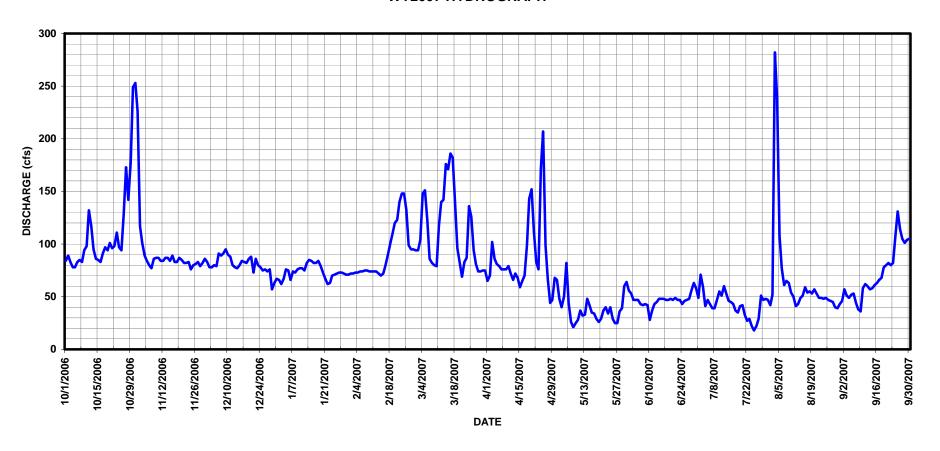
27716 MEAN

282 MIN

18 AC-FT

54970

# 06752500 CACHE LA POUDRE RIVER NEAR GREELEY CO WY2007 HYDROGRAPH



## CACHE LA POUDRE RIVER AT GREELEY WASTEWATER PLANT NEAR GREELEY, CO

LOCATION.--Lat 40°25'21", Long 104°40'37" in SW ¼ section 4, T5N, R65W, Weld County. Just east of Greeley, on right bank, approximately 400 feet east of Highway 85, river mile 5.5.

DRAINAGE AREA.—Not determined.

WTR YR 2007

TOTAL

GAGE. -- Sutron HDR SatLink2 data collection platform and a SDI-12 shaft encoder (installed March 23, 2007) in a 7 ft x 7 ft rock façade shelter with a  $48^{\prime\prime}$  diameter concrete stilling well. No outside reference at this time. The control is a hinged-crest gate with concrete abutments. The elevation of the gage is 4,636.33 feet above sea level (Boyle Engineering Company, 2001).

REMARKS.--Primary record is taken from the hourly averages of 15-minute satellite data. The record is complete and reliable, except there is a substantial amount of missing data from October 1, 2006 - March 23, 2007, due to outdated recording equipment. October 5-9, 2006, there were missing data; November 8, 2006 - March 23, 2007, the gage height was affected by the changing position of the crest gate located approximately 50 feet downstream. The gate was finally completely lowered and good gage heights were being recorded beginning on March 24, 2007. The record is considered estimated and poor from October 1, 2006 - March 23, 2007. From March 24 - September 30, 2007, the record is considered good. Water year 2007 is the first year to publish this record. Station maintained and record developed by Jennifer Stepehnson, City of Greeley WPCF. Record reviewed by Division I Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- CLAWASCO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

DAY         OCT         NOV         DEC         JAN         FEB         MAR         APR         MAY         JUN         JUL         AUG         SEP           1         56         160         49         55         66         64         58         33         61         46         62         58           2         54         75         48         57         67         64         62         31         55         62         98         56           3         54         70         48         59         68         65         76         43         46         52         490         57           4         49         66         48         60         68         68         68         73         44         37         378         59           5         52         65         49         62         67         73         67         84         39         37         155         58           6         55         63         56         63         67         65         66         54         37         32         80         52           7         58         60		MEAN VALUES													
2     54     75     48     57     67     64     62     31     55     62     98     56       3     54     70     48     59     68     65     76     43     46     52     490     57       4     49     66     48     60     68     68     68     73     44     37     378     59       5     52     65     49     62     67     73     67     84     39     37     155     58       6     55     63     56     63     67     65     66     54     37     32     80     52       7     58     60     57     64     66     57     65     21     37     32     68     52	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
3     54     70     48     59     68     65     76     43     46     52     490     57       4     49     66     48     60     68     68     68     73     44     37     378     59       5     52     65     49     62     67     73     67     84     39     37     155     58       6     55     63     56     63     67     65     66     54     37     32     80     52       7     58     60     57     64     66     57     65     21     37     32     68     52	1	56	160	49	55	66	64	58	33	61	46	62	58		
4     49     66     48     60     68     68     68     73     44     37     378     59       5     52     65     49     62     67     73     67     84     39     37     155     58       6     55     63     56     63     67     65     66     54     37     32     80     52       7     58     60     57     64     66     57     65     21     37     32     68     52	2	54	75	48	57	67	64	62	31	55	62	98	56		
5     52     65     49     62     67     73     67     84     39     37     155     58       6     55     63     56     63     67     65     66     54     37     32     80     52       7     58     60     57     64     66     57     65     21     37     32     68     52	3	54	70	48	59	68	65	76	43	46	52	490			
6 55 63 56 63 67 65 66 54 37 32 80 52 7 58 60 57 64 66 57 65 21 37 32 68 52	4	49	66	48	60	68	68	68				378			
7 58 60 57 64 66 57 65 21 37 32 68 52															
	6	55	63	56	63	67	65	66	54			80			
8 57 68 59 64 66 64 65 14 37 31 66 52	7	58	60	57	64	66	57	65				68			
	8	57	68	59	64	66	64	65	14	37	31	66	52		
9 60 70 58 66 65 70 65 29 30 33 69 51		60													
10 60 72 56 67 64 70 65 29 26 46 57 55															
11 80 71 57 67 63 83 62 55 27 39 52 56															
12 63 71 57 65 62 110 60 52 37 59 53 54															
13 55 72 56 63 61 110 64 52 45 57 55 57															
14 50 72 55 62 60 145 61 57 40 37 56 61															
15 45 67 62 62 59 140 58 54 35 32 64 63															
16 46 72 78 62 59 90 60 45 34 33 65 63															
17 49 64 77 63 58 90 63 42 34 36 64 63															
18 50 52 78 63 60 77 78 45 37 36 59 64															
19 51 50 80 63 63 65 86 44 41 39 66 65															
20 54 47 76 62 64 59 76 46 52 44 60 67															
21 55 48 65 62 65 56 63 49 40 39 61 69															
22 57 50 80 62 69 63 49 51 34 38 55 67															
23 62 49 76 62 76 72 49 54 30 38 59 64															
24 53 50 74 62 76 82 106 48 28 39 60 84															
25 49 50 72 62 73 79 110 48 28 39 52 112															
26 72 50 72 63 66 68 59 43 31 41 46 91															
27 92 50 69 63 64 64 37 40 40 48 50 83															
28 75 50 63 64 64 61 35 43 55 78 58 80						64									
29 106 50 56 64 62 32 53 51 63 52 76															
30 208 50 55 65 62 31 67 54 56 51 70															
31 214 55 65 61 66 59 52	31	214		55	65		61		66		59	52			
TOTAL 2141 1904 1941 1943 1826 2359 1896 1465 1185 1358 2713 1959	TOTAL	2141	1904	1941	1943	1826	2359	1896	1465	1185	1358	2713	1959		
MEAN 69.1 63.5 62.6 62.7 65.2 76.1 63.2 47.3 39.5 43.8 87.5 65.3															
AC-FT 4250 3780 3850 3850 3620 4680 3760 2910 2350 2690 5380 3890															
MAX 214 160 80 67 76 145 110 84 61 78 490 112															
MIN 45 47 48 55 58 56 31 14 26 31 46 51															

MAX DISCH: 708 CFS AT 19:00 ON Aug. 03, 2007 GH 2.52 FT. SHIFT 0.27 FT. MAX GH: 2.52 FT. AT 19:00 ON Aug. 03, 2007 (DURING PERIOD OF GOOD RECORD)

62.2 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

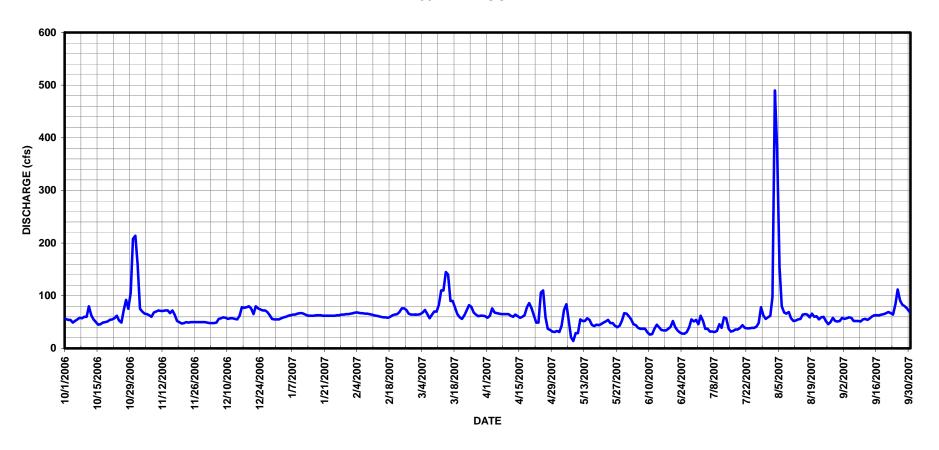
22690 MEAN

490 MTN

45010

14 AC-FT

# CACHE LA POUDRE RIVER AT GREELEY WASTEWATER PLANT NEAR GREELEY CO WY2007 HYDROGRAPH



#### 06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO

LOCATION.--Lat 40°24'45", long 104°33'47", in NW4SW4 sec. 9, T.5 N., R.64 W., Weld County, Hydrologic Unit 10190003, on downstream side of bridge on State Highway 37, 1.9 mi north of railroad in Kersey, and 2.5 mi downstream from Cache la Poudre River.

DRAINAGE AREA AND PERIOD OF RECORD. --9,659 mi<sup>2</sup>. May 1901 to Dec. 1903, Mar. 1905 to current year. Monthly totals only for some periods. Periodic water-quality data available from 1950.

GAGE. -- Graphic water-stage recorder and shaft encoder (SE) activated by a manometer and satellite monitoring DCP in a concrete block shelter. In May 2006, a supplemental Sutron Accububble, orifice line and muffler were installed directly in the channel and not connected to the bridge piers. An outside wire weight is used for referencing the gage. A land-line phone is installed and the DCP is equipped with a voice modem card. The datum of the gage is 4578.02 ft MSL (NAVD 1988)established by level circuit in 2005.

REMARKS.--The primary record is hourly averages of 15-minute data taken from either the manometer or the acububbler, depending which appears to be working better. The bubbler was used for the obvious situations where the chart/manometer was freezing or painting. For less obvious periods, "better" was determined by how close each instrument was for the calibration visits, and which instrument had the smaller max/min range. The composite record is complete and reliable. Almost daily visits helped support this record. Properly maintained, the manometer will usually track better than the bubbler. Calibrating the bubbler is difficult since often the orifice muffler is covered with sand; whereas the manometer orifice can be lifted above the sand. Record is rated as fair due to variability ("painting" or scatter) in the primary GH data. Station maintained and record developed by Bob Cooper.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- PLAKERCO22 USED FROM 01-OCT-2006 TO 30-SEP-2007

						MEAN VALUE	ES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	362	1120	685	611	514	1330	2160	3080	2800	576	483	395
2	362	844	712	591	455	1300	1980	3720	2610	649	366	476
3	364	735	702	565	473	1220	1850	3940	2650	543	1210	449
4	373	672	689	606	631	1160	1570	3430	2720	482	1700	520
5	372	713	692	653	679	1120	1200	3310	2480	436	1110	498
6	373	748	726	721	660	1130	1010	3650	2170	411	1000	473
7	374	836	720	667	716	1110	954	4620	2160	364	1230	474
8	359	860	706	642	842	1050	984	3560	2360	320	898	451
9	392	828	710	641	804	895	973	2860	2180	300	767	420
10	497	790	691	650	749	846	970	2460	1740	301	558	453
11	762	760	674	649	692	847	911	2320	1370	313	456	475
12	688	755	657	609	693	942	1100	2310	1250	368	402	479
13	604	753	649	541	745	839	1070	2180	1700	436	313	446
14	575	775	652	495	762	783	979	2360	2100	356	254	426
15	545	742	672	465	701	741	944	3740	1740	291	247	424
16	506	742	747	458	670	723	798	4430	1560	243	298	422
17	533	732	802	493	687	723	659	3580	1510	208	373	443
18	572	787	814	507	719	733	810	3450	1460	192	281	462
19	767	784	823	492	735	696	706	3220	1490	187	285	490
20	761	774	843	469	796	696	587	3270	1270	178	320	508
21	710	784	762	474	930	689	481	3460	1120	186	355	480
22	750	737	794	452	1050	776	439	3560	1230	177	308	450
23	778	717	838	458	1150		440	4360	1070	163	285	421
24	740	673	814		1310	1780	547	4770	969	172	332	465
25	728	659	771	475	1390	2660	4670	4770	883	142	785	776
26	769	653	708		1320	2180	5690	3680	845	136	631	853
27	1190	650	659		1320	1870	3640	3110	851	161	436	722
28	1580	649	714		1330	2050	3110	2860	835	602	334	648
29	1340	662	702			2080	2980	2860	731		317	635
30	1350	703	664				3020	4050	622	885	350	629
31	1240		624	517		2430		3590		690	358	
TOTAL	21316	22637	22416	16940	23523	39199	47232	106560	48476	11888	17042	15263
MEAN	688	755	723		840	1264	1574	3437	1616	383	550	509
AC-FT	42280	44900	44460		46660	77750	93680	211400	96150	23580	33800	30270
MAX	1580	1120	843		1390	2660	5690	4770	2800	1420	1700	853
MIN	359	649	624	452	455	689	439	2180	622	136	247	395
CAL YR		TOTAL	169560		465 M		10 MIN		AC-FT	336320		

MAX DISCH: 8040 CFS AT 01:15 ON Apr. 26, 2007 GH 8.87 FT. SHIFT -0.3 FT. MAX GH: 8.87 FT. AT 01:15 ON Apr. 26, 2007

1075 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

392492 MEAN

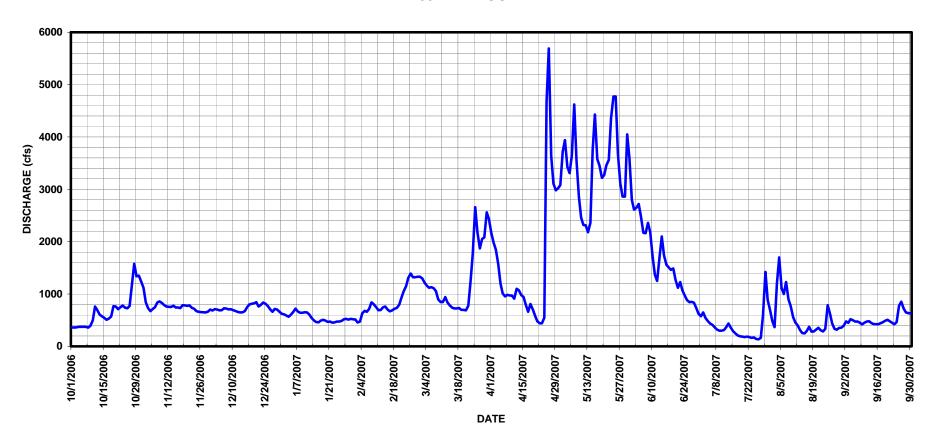
WTR YR 2007

TOTAL

5690 MIN

136 AC-FT

### 06754000 SOUTH PLATTE RIVER NEAR KERSEY CO WY2007 HYDROGRAPH



#### 06758500 SOUTH PLATTE RIVER NEAR WELDONA, CO

LOCATION.--Lat 40°19'17", long 103°55'13" (NAD 1983), in SW4SW4 sec. 7, T.4 N., R.58 W., Morgan County, Hydrologic Unit 10190003, on left bank 600 ft downstream from bridge on State Highway 144, 2.8 mi southeast of Weldona, and 4.2 mi upstream from Bijou Creek.

DRAINAGE AREA AND PERIOD OF RECORD. -- 13,190 mi<sup>2</sup>. October 1952 to current year.

GAGE.--Graphic water-stage recorder and satellite monitoring equipment (Sutron SatLink Logger and shaft encoder)
in a corrugated metal pipe and stilling well. An electric tape inside the station references the gage.
There is no outside reference. A radio bridge is also installed to allow a nearby ditch return to be
transmitted on the Satlink.

REMARKS.--The primary record is hourly averages of 15-minute data taken from satellite monitoring with chart back up. The recorder had time problems all year, but was still useable to fill in all the missing DCP hours. The record is complete and reliable except for the following periods: the stage-discharge relationship was affected by ice January 12 - February 16, 2007. During this period, from January 13 through February 1, the record is missing or unreliable due to ice in the stilling well or leaking oil cylinders. Encoder calibration was supported by 72 visits to the gage. The record is good, except for the following: January 12 - February 16, 2007, which was estimated and poor due to ice conditions; and December 23-27, 2006, is fair due to poor definition of the high water end of the stage-shift table in use for this period. Station maintained and record developed by Bob Cooper.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- PLAWELCO19 USED FROM 01-OCT-2006 TO 30-SEP-2007

					M	MEAN VALUE	S					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269	346	113	289	230	650	738	1110	2420	388	461	284
2	256	364	145	297	220	640	800	1130	1470	376	360	293
3	314	284	161	295	230	615	895	1670	1160	407	300	374
4	339	216	166	252	260	568	802	1890	1120	331	844	376
5	342	173	203	213	330	516	839	1690	1370	279	728	420
6	334	149	214	220	410	476	864	1640	1330	221	475	412
7	356	137	202	293	410	449	700	2000	801	180	503	381
8	381	127	180	403	380	457	815	2580	737	184	486	383
9	415	124	147	312	360	539	860	1890	922	199	480	377
10	481	120	142	276	350	595	753	1340	859	181	503	380
11	466	112	139	247	340	630	800	1050	599	206	347	416
12	506	106	143	190	320	634	785	881	491	215	225	446
13	509	103	145	200	280	613	788	931	639	238	158	456
14	459	98	141	200	250	590	612	956	830	292	197	426
15	423	95	145	220	240	585	557	1010	646	239	189	409
16	391	95	137	230	210	571	678	1790	388	175	178	365
17	353	95	145	250	180	613	595	2320	252	118	195	329
18	406	94	158	290	153	669	412	1960	237	156	254	309
19	467	93	165	300	142	670	433	1790	432	200	242	294
20	527	94	172	290	139	644	405	1650	442	181	230	279
21	553	93	127	270	136	581	305	1710	355	174	235	247
22	553	93	317	260	139	512	224	1850	405	176	248	223
23	560	96	628	280	148	565	164	1950	635	208	258	200
24	544	95	788	280	181	758	206	2490	605	259	254	187
25	467	95	713	290	307	755	407	3070	518	268	272	203
26	433	93	613	330	601	914	1960	3030	432	263	436	363
27	460	93	519	370	654	792	2110	2310	386	259	334	564
28	500	92	359	360	655	850	1230	1850	392	289	262	527
29	419	92	316	310		976	1270	1620	362	413	211	486
30	287	94	309	300		924	1170	1550	371	952	199	481
31	289		300	290		848		2670		711	261	
TOTAL	13059	3961	8152	8607	8255	20199	23177	55378	21606	8738	10325	10890
MEAN	421	132	263	278	295	652	773	1786	720	282	333	363
AC-FT	25900	7860	16170	17070	16370	40060	45970	109800	42860	17330	20480	21600
MAX	560	364	788	403	655	976	2110	3070	2420	952	844	564
MIN	256	92	113	190	136	449	164	881	237	118	158	187

MAX DISCH: 3620 CFS AT 20:15 ON May. 25, 2007 GH 5.9 FT. SHIFT -0.09 FT. MAX GH: 5.9 FT. AT 20:15 ON May. 25, 2007

239 MAX

527 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

87193 MEAN

192347 MEAN

CAL YR 2006

WTR YR 2007

TOTAL

TOTAL

1600 MIN

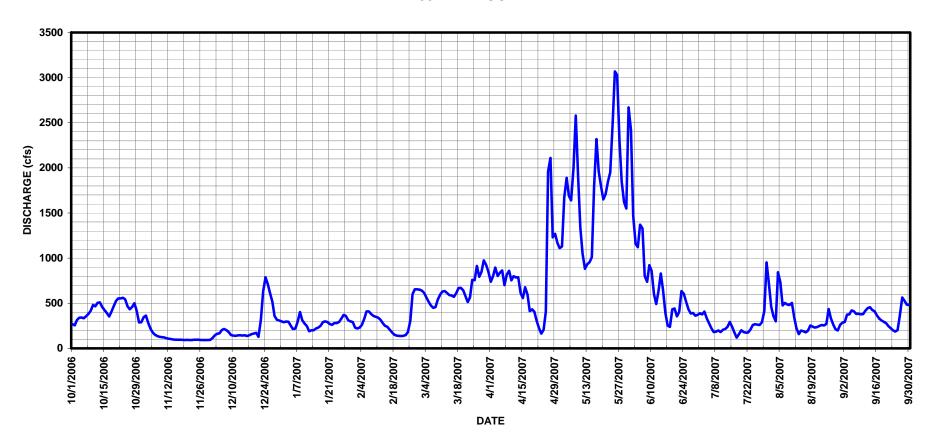
3070 MIN

62 AC-FT

92 AC-FT

172900

# 06758500 SOUTH PLATTE RIVER NEAR WELDONA CO WY2007 HYDROGRAPH



#### 06759910 SOUTH PLATTE RIVER AT BALZAC, CO

LOCATION.--Lat 40°21'28", long 103°31'43", in SWWNEW sec. 33, T.5 N., R.55 W., Morgan County, Hydrologic Unit 10190012, on bank 4.3 mi northeast of Snyder, and 0.7 mi downstream from North Sterling Canal.

DRAINAGE AREA AND PERIOD OF RECORD. --16,623 mi<sup>2</sup>; Oct. 1916 to present, prior to Oct. 1933: monthly discharge onlv.

GAGE.--Stevens A-35 type graphic water stage recorder, satellite monitoring Sutron 8210 DCP and shaft encoder and stilling well. Gage is referenced with an electric tape and there is a supplemental outside wire weight. The DCP is equipped with a speech modem.

REMARKS.--The primary record is hourly averages of fifteen-minute data taken from satellite monitoring with chart back up. The record is complete, reliable, and good, except for the following days with partially plugged inlets, which were fair to poor. These days are rated fair: October 9, 11, 18, 19; November 2; December 6, 2006; January 19; February 25; March 5; April 1; May 14, 16, 17; June 16; July 30; August 5, 6, 8, 9, 12, 13, 26, 27; September 3, 4, 26, 27, 2007. These days are considered totally estimated and poor: October 10; December 23, 24, 2006; February 26, 27; March 28, 29; June 23-25, 2007. Also, flows above 1640 cfs, including the peak flow, should be considered fair since they are based on stage-shift relations using high measurements from previous years. Station maintained by Bob Erosky and record developed by Bob Erosky and Bob Cooper.

> DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

1230

30773

993

61040

2620

93

13588

26950

453

2300

15

774

8552

276

774

144

16960

153

8998

290

700

153

17850

6846

228

385

103

13580

RATING TABLE. -- PLABALCO03 USED FROM 01-OCT-2006 TO 30-SEP-2007

31

TOTAL.

MEAN

MAX

MTN

AC-FT

18

2306

74.4

4570

233

1.5

442

14.7

877

2.8

11

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	19	14	81	201	535	98	659	2300	248	562	170
2	43	28	15	75	142	529	47	474	1500	327	376	183
3	43	23	16	192	185	528	91	572	974	350	319	190
4	47	18	17	177	168	494	124	1060	895	353	312	250
5	57	17	17	103	234	455	120	1070	873	310	700	263
6	60	16	18	71	317	406	130	880	1010	312	524	300
7	69	16	17	70	389	332	145	877	814	278	437	299
8	91	17	16	151	334	287	174	1400	397	244	471	279
9	127	16	16	228	318	309	306	1370	397	241	391	280
10	233	16	14	204	297	383	225	842	455	208	446	303
11	218	16	14	126	283	435	165	437	260	202	417	335
12	125	16	14	117	277	442	175	193	187	228	307	381
13	101	15	14	138	249	467	268	93	215	285	217	385
14	92	14	14	129	207	403	164	113	136	265	184	299
15	96	13	14	141	195	389	48	157	232	250	196	239
16	118	12	14	161	185	385	23	300	88	209	199	263
17	130	12	13	170	128	381	23	1080	15	164	194	269
18	136	12	13	205	102	441	17	1150	44	144	190	244
19	118	12	14	204	85	450	16	1030	99	161	192	221
20	27	12	15	219	79	430	16	941	264	181	179	187
21	25	12	20	234	72	234	16	855	245	169	167	160
22	39	12	31	191	29	57	16	990	203	167	169	128
23	51	11	140	217	29	18	15	1150	234	157	201	103
24	64	12	404	236	34	153	18	1270	309	192	203	105
25	43	12	546	218	61	87	43	1860	354	233	198	104
26	22	12	577	240	278	21	43	2620	292	238	208	121
27	18	12	517	302	485	23	1690	2190	233	258	297	246
28	17	13	385	320	507	33	1070	1510	196	430	228	200
29	15	13	139	286		177	612	1270	192	397	198	164
30	17	13	66	227		234	782	1130	175	577	163	175

164

9682

312

535

18

19200

6680

223

13250

1690

15

CAL YR 2006 TOTAL. 43339 MEAN 119 MAX 1120 MIN 11 AC-FT 85960 WTR YR 2007 TOTAL 102648 MEAN 281 MAX 2620 MIN 11 AC-FT 203600

5870

210

507

29

11640

MAX DISCH: 2980 CFS AT 11:00 ON May. 26, 2007 GH 5.82 FT. SHIFT -1.20 FT. MAX GH: 5.82 FT. AT 11:00 ON May. 26, 2007

264

5697

11300

184

320

70

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

90

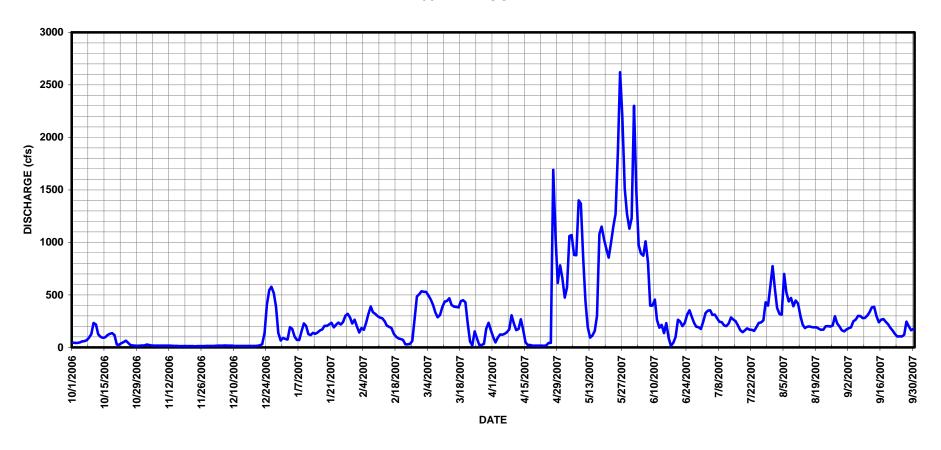
3214

104

577

13

### 06759910 SOUTH PLATTE RIVER AT BALZAC CO WY2007 HYDROGRAPH



#### 06763990 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2

LOCATION.--Lat 40°58'37", long 102°14'52", in NE4SE4 sec. 33, T.12 N., R.44 W., Sedgwick County, on right bank of channel No 2 (right channel) 5 ft downstream from bridge on U.S. Highway 385, 0.9 mi southeast of Julesburg, 3.0 mi upstream from Colorado-Nebraska State line, and 8 mi downstream from Lodgepole Creek.

DRAINAGE AREA AND PERIOD OF RECORD.--23,821 mi<sup>2</sup>. April 1902 to current year. Monthly data only for some periods. Published as near Julesburg and at Ovid in earlier years.

GAGE.--Satellite monitoring DCP connected to a Sutron Accubbler. A wire weight gage on the bridge is used to
 reference the bubbler. The accubbler is located on the bridge next to the shaft encoder in the bridge well.
 Datum of gage formerly 3,448.51 ft. MSL (NGVD 1929), 3449.50 ft MSL (NAVD 1988) confirmed by level
 circuit in 2005.

REMARKS.--The primary record is the hourly averages of 15-minute satellite monitoring data. The record is complete, reliable, and good, except for the following periods, which are estimated and poor: April 16-21, 25; May 7, 8, 12; June 18-20, 27-30; and July 1-3, 2007. April 16-21, and Jun 27-Jul 3 are estimates due to a lack of precise observations of zero flow. April 25 had a large correction applied to the GH. May 7-8 and June 18-20 are days with missing record. May 12 is considered estimated because it exceeded the measurement range on the stage-shift table that the discharge was computed from. During the periods: October 1, 2006 - April 15, 2007, and July 4 - September 30, 2007, water was present at bubbler orifice to record a GH, but ponded. No flow occurred. In the winter, ice accumulated on the ponded water and raised the GH, but no flow occurred. "No flow" was confirmed by observations throughout these periods. No flow occurred in Channel 2 in water year 2006, so the calendar year 2006 total is indeed zero. This record is added to the records from channels 1 and 4 to form the record for the South Platte River at Julesburg, Combined flow. Station maintained by Bob Erosky and record developed by Bob Cooper.

RATING TABLE. -- PLAJURCO19 USED FROM 01-OCT-2006 TO 30-SEP-2007

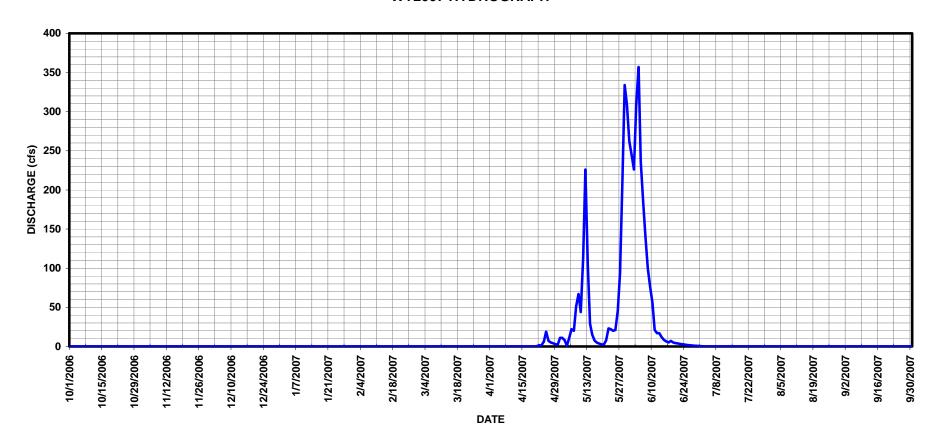
# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	11	245	.38	0	0
2	0	0	0	0	0	0	0	11	226	.20	0	0
3	0	0	0	0	0	0	0	8.0	308	.06	0	0
4	0	0	0	0	0	0	0	.97	357	0	0	0
5	0	0	0	0	0	0	0	11	236	0	0	0
6	0	0	0	0	0	0	0	22	185	0	0	0
7	0	0	0	0	0	0	0	20	141	0	0	0
8	0	0	0	0	0	0	0	51	100	0	0	0
9	0	0	0	0	0	0	0	67	77	0	0	0
10	0	0	0	0	0	0	0	44	56	0	0	0
11	0	0	0	0	0	0	0	113	21	0	0	0
12	0	0	0	0	0	0	0	226	17	0	0	0
13	0	0	0	0	0	0	0	104	17	0	0	0
14	0	0	0	0	0	0	0	29	12	0	0	0
15	0	0	0	0	0	0	0	15	8.4	0	0	0
16	0	0	0	0	0	0	0	7.3	6.6	0	0	0
17	0	0	0	0	0	0	.04	4.9	5.1	0	0	0
18	0	0	0	0	0	0	.08	3.7	7.2	0	0	0
19	0	0	0	0	0	0	.08	2.7	5.2	0	0	0
20	0	0	0	0	0	0	.03	2.4	4.3	0	0	0
21	0	0	0	0	0	0	.46	7.7	3.8	0	0	0
22	0	0	0	0	0	0	1.5	23	3.2	0	0	0
23	0	0	0	0	0	0	1.5	22	2.8	0	0	0
24	0	0	0	0	0	0	6.3	20	2.4	0	0	0
25	0	0	0	0	0	0	19	21	1.9	0	0	0
26	0	0	0	0	0	0	7.1	46	1.7	0	0	0
27	0	0	0	0	0	0	5.1	94	1.3	0	0	0
28	0	0	0	0	0	0	4.1	213	1.0	0	0	0
29	0	0	0	0		0	2.9	334	.72	0	0	0
30	0	0	0	0		0	2.4	309	.55	0	0	0
31	0		0	0		0		262		0	0	
TOTAL	0	0	0	0	0	0	50.59	2105.67	2054.17	.64	0	0
MEAN	0	0	0	0	0	0	1.69	67.9	68.5	.021	0	0
AC-FT	0	0	0	0	0	0	100	4180	4070	1.3	0	0
MAX	0	0	0	0	0	0	19	334	357	.38	0	0
MIN	0	0	0	0	0	0	0	.97	.55	0	0	0
CAL YR	2006	TOTAL	0	MEAN	0 MAX	ζ	0 MIN	0	AC-FT	0		
WTR YR	2007	TOTAL	4211.07	MEAN	11.5 MAX	35	57 MIN	0	AC-FT	8350		

MAX DISCH: 385 CFS AT 18:15 ON Jun. 3, 2007 GH 5.55 FT. SHIFT -0.77 FT. MAX GH: 5.55 FT. AT 18:15 ON Jun. 3, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

### 06763990 SOUTH PLATTE RIVER AT JULESBURG CO CHANNEL NO 2 WY2007 HYDROGRAPH



#### 06763990 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1

LOCATION.--Lat 40°58'37", long 102°14'52", in NE4SE4 sec. 33, T.12 N., R.44 W., on Highway 385 bridge south of Julesburg CO.

DRAINAGE AREA. -- 23,821 mi<sup>2</sup>.

GAGE.--Satellite monitoring DCP (Sutron 8210) connected to an AccuBubbler. A wire weight gage on the bridge is used to reference the gage, with a supplemental staff located on the bridge pier closest to the shelter. A telephone & speech modem are installed so that the gage can be accessed by phone (970-474-0948). Datum of gage formerly 3,448.51 ft. MSL (NGVD 1929), 3449.50 ft MSL (NAVD 1988) confirmed by level circuit in 2005.

REMARKS.--The primary record is hourly averages of 15-minute satellite monitoring data. The record is complete, reliable, and good, except for the following periods. The following days have some degree of estimation and are rated fair: November 30, December 5, 25-28, 2006, January 9-11, March 9-10, June 5, September 18-27, 2007. The following period, which includes March 9-10 previously listed, is also fair due to variations in shifts: February 11-14, 18-28, March 1 - May 9, 2007. The following days are estimated and poor: December 30, 2006, January 4, 6-8, 12-31, February 1-10, 15-17, 2007. This record is added to the records from channels 2 and 4 to form the record for the South Platte River at Julesburg, Combined flow. Station maintained by Bob Erosky and record developed by Bob Erosky and Bob Cooper.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

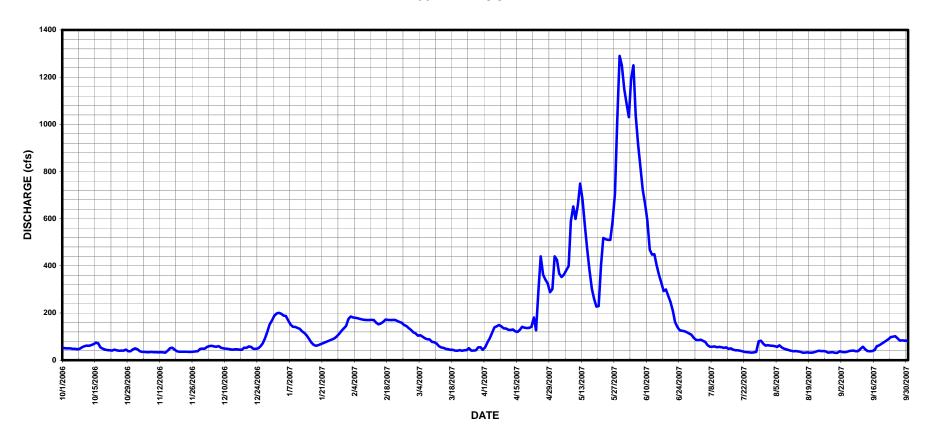
RATING TABLE.--ONEJURCO06 USED FROM 01-OCT-2006 TO 30-SEP-2007

					ME.	AN VALUE	S					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	50	49	198	175	119	54	440	1090	86	64	38
2	50	46	56	201	185	113	76	425	1030	85	62	35
3	50	38	60	197	181	104	93	367	1190	87	61	34
4	50	35	61	189	180	106	117	353	1250	82	60	35
5	48	35	58	187	178	100	139	363	1040	77	56	39
6	48	34	57	169	175	93	144	381	916	64	63	40
7	47	34	60	151	172	89	149	399	817	57	54	41
8	48	35	53	142	171	88	143	590	723	57	49	38
9	54	34	50	141	170	78	135	652	661	58	46	39
10	59	34	49	137	170	76	134	599	592	55	43	48
11	62	33	48	133	171	71	129	659	469	56	40	57
12	61	34	46	123	170	60	128	749	448	55	38	47
13	64	33	45	115	159	54	130	679	449	52	39	39
14	68	32	46	105	152	52	122	574	402	54	37	38
15	74	40	46	90	156	48	120	470	361	48	36	39
16	72	51	45	75	162	47	129	383	329	50	32	43
17	54	53	44	65	172	44	142	303	293	45	32	59
18	49	45	53	61	171	44	138	262	300	42	33	63
19	45	38	52	64	170	41	136	227	273	42	32	69
20	43	36	58	68	170	40	137	229	247	40	32	76
21	42	36	56	72	171	43	142	403	209	38	34	82
22	41	36	48	76	167	40	181	518	161	35	37	89
23	45	36	48	80	162	42	127	513	140	34	40	98
24	42	35	50	84	159	43	298	510	127	33	39	100
25	40	35	58	88	149	51	440	510	125	32	39	102
26	41	36	71	93	145	41	362	588	123	33	37	92
27	41	37	92	101	136	41	342	706	119	35	32	83
28	45	38	121	112	128	42	325	1010	113	80	33	84
29	38	48	151	124		54	288	1290	108	83	34	83
30	38	49	168	135		55	301	1250	95	70	31	83
31	46		188	145		44		1150		62	31	
TOTAL	1557	1156	2087	3721	4627	1963	5301	17552	14200	1727	1296	1813
MEAN	50.2	38.5	67.3	120	165	63.3	177	566	473	55.7	41.8	60.4
AC-FT	3090	2290	4140	7380	9180	3890	10510	34810	28170	3430	2570	3600
MAX	74	53	188	201	185	119	440	1290	1250	87	64	102
MIN	38	32	44	61	128	40	54	227	95	32	31	34
CAL YR WTR YR	2006 2007	TOTAL TOTAL	24177 57000	MEAN MEAN	66.2 MAX 156 MAX	25 129		17 31	AC-FT AC-FT	48960 113100		

MAX DISCH: 1330 CFS AT 20:45 ON May. 29, 2007 GH 6.61 FT. SHIFT 0.06 FT. MAX GH: 6.61 FT. AT 20:45 ON May. 29, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 06763990 SOUTH PLATTE RIVER AT JULESBURG CO CHANNEL NO 1 WY2007 HYDROGRAPH



06763980 SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3)

LOCATION.--Lat 40°58'46", long 102°15'15", in NW4NE4 sec. 33, T.12 N., R.44 W., Sedgwick County, Hydrologic Unit 10190018, on left bank of channel No 4 (left channel) 215 ft downstream from bridge on U.S. Highway 385, 0.9 mi southeast of Julesburg, 3.0 mi upstream from Colorado-Nebraska State line, and 8 mi downstream from Lodgepole Creek.

DRAINAGE AREA. -- 23,821 mi<sup>2</sup>.

GAGE.--Metal pipe shelter and well. Supplemental outside chain gage. The chart recorder was removed on October 20, 2005. DCP was removed in 2006. GH record was not kept in 2007. Station description is in the South Platte at Julesburg-combined flow-record envelope.

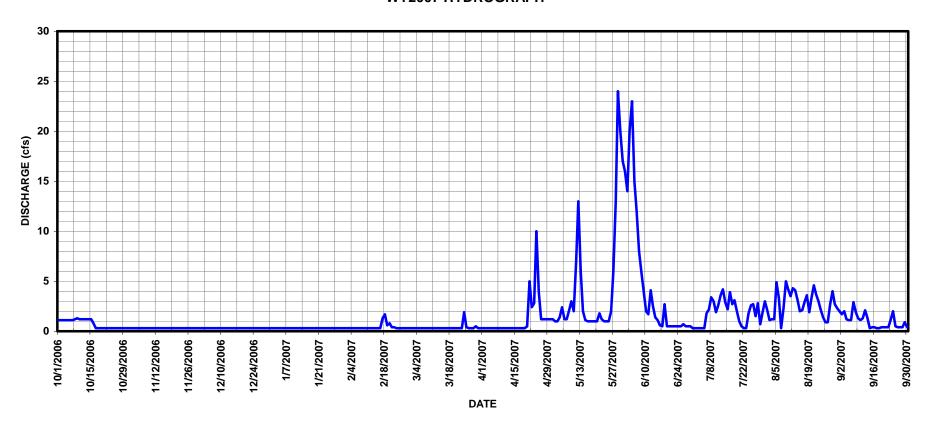
REMARKS.—Gage height record is unreliable at this gage due to ponding from the vegetative growth during the recent drought period. Gage height data were not collected in WY2007. Daily discharges for this location are estimated from record on the Julesburg Return Ditch, measurements, and comparison with channel 2 flows. Discharge was estimated for the entire year by adding discharges for the Julesburg return ditch to a base flow for the channel. The ditch control is a concrete spill, so these figures are considered good. However, the base flow is totally estimated using measurements and comparison with flows in Channel 2. The record is estimated and poor. This record is added to the daily flows of channels 1 and 2 to form the record for the South Platte River at Julesburg, Combined flow. Station maintained by Bob Erosky and record developed by Bob Cooper.

DISCHARGE,	ΙN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007
			MEAN	LTAV L	IES				

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.30	.30	.30	.30	.30	.30	1.2	16	.30	2.1	2.0
2	1.1	.30	.30	.30	.30	.30	.30	1.0	14	.30	1.1	1.7
3	1.1	.30	.30	.30	.30	.30	.30	1.0	20	.30	1.2	2.0
4	1.1	.30	.30	.30	.30	.30	.30	1.4	23	.30	1.2	1.2
5	1.1	.30	.30	.30	.30	.30	.30	2.4	15	.30	4.9	1.1
6	1.1	.30	.30	.30	.30	.30	.30	1.2	12	1.8	3.3	1.1
7	1.1	.30	.30	.30	.30	.30	.30	1.2	8.0	2.2	.30	2.9
8	1.2	.30	.30	.30	.30	.30	.30	2.1	6.0	3.4	2.3	1.9
9	1.3	.30	.30	.30	.30	.30	.30	3.0	4.0	3.0	5.0	1.3
10	1.2	.30	.30	.30	.30	.30	.30	2.0	2.0	1.9	4.2	1.1
11	1.2	.30	.30	.30	.30	.30	.30	7.0	1.7	2.6	3.5	1.3
12	1.2	.30	.30	.30	.30	.30	.30	13	4.1	3.6	4.3	2.1
13	1.2	.30	.30	.30	.30	.30	.30	6.0	2.5	4.2	4.1	1.3
14	1.2	.30	.30	.30	.30	.30	.30	2.0	1.4	2.9	3.1	.30
15	1.2	.30	.30	.30	.30	.30	.30	1.1	1.1	2.2	2.0	.40
16	.80	.30	.30	.30	.30	.30	.30	1.0	.60	3.9	2.1	.40
17	.30	.30	.30	.30	1.3	.30	.30	1.0	.50	2.7	2.9	.30
18	.30	.30	.30	.30	1.7	.30	.30	1.0	2.7	3.1	3.6	.30
19	.30	.30	.30	.30	.60	.30	.30	1.0	.50	2.0	1.9	.40
20	.30	.30	.30	.30	.80	.30	.50	1.0	.50	1.0	3.3	.40
21	.30	.30	.30	.30	.40	.30	5.0	1.8	.50	.50	4.6	.40
22	.30	.30	.30	.30	.40	.30	2.4	1.2	.50	.30	3.7	.40
23	.30	.30	.30	.30	.30	.30	2.8	1.0	.50	.30	3.0	1.2
24	.30	.30	.30	.30	.30	1.9	10	1.0	.50	1.8	2.1	2.0
25	.30	.30	.30	.30	.30	.40	3.9	1.0	.50	2.6	1.4	.50
26	.30	.30	.30	.30	.30	.30	1.2	2.0	.70	2.7	.90	.40
27	.30	.30	.30	.30	.30	.30	1.2	6.0	.50	1.5	.90	.40
28	.30	.30	.30	.30	.30	.30	1.2	13	.50	2.8	2.7	.40
29	.30	.30	.30	.30		.50	1.2	24	.50	.70	4.0	.90
30	.30	.30	.30	.30		.30	1.2	20	.30	1.9	2.7	.40
31	.30		.30	.30		.30		17		3.0	2.3	
TOTAL	22.70	9.00	9.30	9.30	11.80	11.20	36.30	138.6	140.60	60.10	84.70	30.50
MEAN	.73	.30	.30	.30	.42	.36	1.21	4.47	4.69	1.94	2.73	1.02
AC-FT	45	18	18	18	23	22	72	275	279	119	168	60
MAX	1.3	.30	.30	.30	1.7	1.9	10	24	23	4.2	5.0	2.9
MIN	.30	.30	.30	.30	.30	.30	.30	1.0	.30	.30	.30	.30
CAL YR	2006	TOTAL	259.45	MEAN	0.71 MAX	7.	4 MIN	0	AC-FT	515		
WTR YR	2007	TOTAL	564.1		1.55 MAX		4 MIN		AC-FT	1120		

MAX DISCH: NOT DETERMINED MAX GH: NOT DETERMINED

# 06763980 SOUTH PLATTE RIVER AT JULESBURG CO CHANNEL NO 4 (INCLUDES FLOW FROM CHANNEL NO 3) WY2007 HYDROGRAPH



#### 06764000 SOUTH PLATTE RIVER AT JULESBURG, CO (COMBINED)

LOCATION .-- See Channel No. 2 and Channel No. 4.

DRAINAGE AREA AND PERIOD OF RECORD. -- 23,821 mi²; Apr. 1902 to present. Monthly discharge for some periods published in USGS WSP 1310.

GAGE.--For the past few years virtually all of the total flow was in Channel One. In 2007, flows got high enough in the spring to split river water into both channels 2 and 4. Channel Two had live flow in April through June, but was dry the rest of the year. Channel Four had a trickle of base flow, some augmentation and storm water in the spring and summer, and a short period of river water when flows peaked in the other two channels. The Channel 4 gage was abandoned last year due to swampy conditions. Flows this year were estimated using observations, measurements, and data from a ditch return gage located about 4 mile above the old Channel 4 gage site. The return gage is fairly accurate and has satellite monitoring.

REMARKS.-Each channel had estimated periods this year. If an individual channel's estimation contributed a significant percentage to the total flow for a particular day (>10% of mean daily Q), then the combined flow is considered estimated for that day. The combined flow record is good, except for December 30, 2006, January 4, 6-8, 12-31, February 1-10, 15-17, May 12, August 21, 29-31, September 1-5, 2007, which are estimated and poor; and November 30, December 1-5, 25-28, 2006, January 9-11, February 11-14, 18-28, Mar 1 -May 9, June 5, September 18-27, 2007, which are fair. Much work went into estimating the flow in Channel 4, and gaging the overflow that went into Channel 2. After all was done, Channel One still had 92% of the total flow, so the accuracy of the combined flow resides mainly with Channel One.

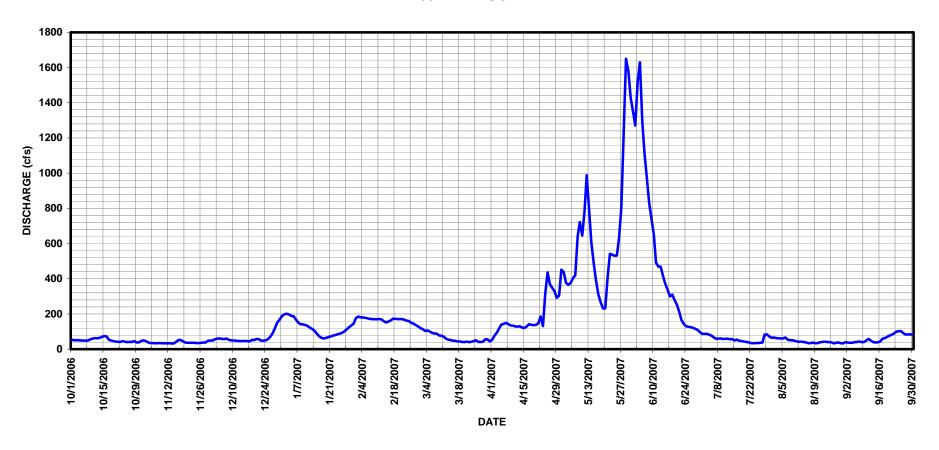
DISCHARGE,	IN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007
			MEAN	1.TA7.T	IES				

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	50	49	198	175	119	54	452	1350	87	66	40
2	51	46	56	201	185	113	76	437	1270	86	63	37
3	51	38	60	197	181	104	93	376	1520	87	62	36
4	51	35	61	189	180	106	117	365	1630	82	61	36
5	49	35	58	187	178	100	139	376	1290	77	61	40
6	49	34	57	169	175	93	144	404	1110	66	66	41
7	48	34	60	151	172	89	149	420	966	59	54	44
8	49	35	53	142	171	88	143	643	829	60	51	40
9	55	34	50	141	170	78	135	722	742	61	51	40
10	60	34	49	137	170	76	134	645	650	57	47	49
11	63	33	48	133	171	71	129	779	492	59	44	58
12	62	34	46	123	170	60	128	988	469	59	42	49
13	65	33	45	115	159	54	130	789	469	56	43	40
14	69	32	46	105	152	52	122	605	415	57	40	38
15	75	40	46	90	156	48	120	486	371	50	38	39
16	73	51	45	75	162	47	129	391	336	54	34	43
17	54	53	44	65	173	44	142	309	299	48	35	59
18	49	45	53	61	173	44	138	267	310	45	37	63
19	45	38	52	64	171	41	136	231	279	44	34	69
20	43	36	58	68	171	40	138	232	252	41	35	76
21	42	36	56	72	171	43	147	413	213	39	39	82
22	41	36	48	76	167	40	185	542	165	35	41	89
23	45	36	48	80	162	42	131	536	143	34	43	99
24	42	35	50	84	159	45	314	531	130	35	41	102
25	40	35	58	88	149	51	436	532	127	35	40	103
26	41	36	71	93	145	41	370	636	125	36	38	92
27	41	37	92	101	136	41	348	806	121	37	33	83
28	45	38	121	112	128	42	330	1240	115	83	36	84
29	38	48	151	124		55	292	1650	109	84	38	84
30	38	49	168	135		55	305	1580	96	72	34	83
31	46		188	145		44		1430		65	33	
TOTAL	1573	1156	2087	3721	4632	1966	5354	19813	16393	1790	1380	1838
MEAN	50.7	38.5	67.3	120	165	63.4	178	639	546	57.7	44.5	61.3
AC-FT	3120	2290	4140	7380	9190	3900	10620	39300	32520	3550	2740	3650
MAX	75	53	188	201	185	119	436	1650	1630	87	66	103
MIN	38	32	44	61	128	40	54	231	96	34	33	36
CAL YR	2006	TOTAL	24502	MEAN	67.1 MAX	25			AC-FT	48600		
WTR YR	2007	TOTAL	61703	MEAN	169 MAX	165	0 MIN	32	AC-FT	122400		

MAX DISCH: 1730 CFS AT 21:00 ON Jun 3, 2007 GH 6.59 FT. SHIFT N/A

MAX GH: 6.61 FT. AT 20:45 ON May 29, 2007

# 06764000 SOUTH PLATTE RIVER AT JULESBURG CO (COMBINED) WY2007 HYDROGRAPH



#### STATELINE DITCH RETURN NEAR JULESBURG CO

LOCATION.--Lat 40°59'58", long 102°14'55", in NW1/4 NW1/4 of sec 27, T. 12N, R. 44W, Yuma County, East of Julesburg, Co. Gage is about 700 ft. north of US Highway 138 on Yuma County Road 43 near the Colorado-Nebraska Stateline.

DRAINAGE AREA . -- Not determined.

GAGE. -- Sutron SDR datalogger in a metal box over a small diameter stilling well at a 4-foot steel Parshall Flume set in concrete in an earthen ditch. Satellite monitoring DCP in NEMA box mounted on nearby posts. The primary reference is the flume staff. Gage is seasonal and is not operated in the winter. Julesburg irrigation district has a number of wells that pump directly into the ditch for delivery to the river as augmentation. This gage was established in 2001 to record the augmentation water. The gage is located on a lateral of the Stateline ditch that empties into the River in the area of the Julesburg Fairgrounds. The ditch itself continues on and tails out in the river just below the state line.

REMARKS.--The record is taken from hourly averages of 15-minute satellite data. The record is complete and reliable. The canal did not run water on October 18, 2006, October 20, 2006 - April 23, 2007, April 26 -May 3, 2007, and June 6-7, 2007. The record is considered fair due to lack of confirmation of the Parshall Flume rating by measurements. WY2007 is the first year to publish the record for this gage. Station maintained and record developed by Devin Ridnour.

RATING TABLE. -- STD04FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

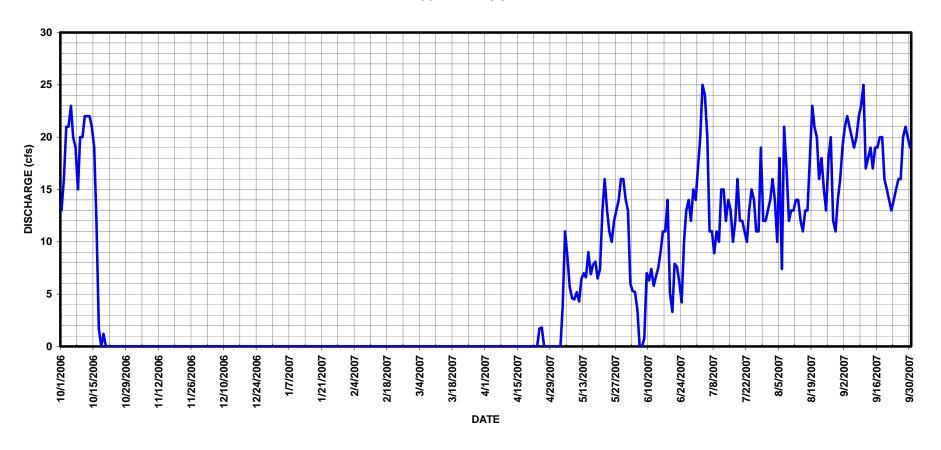
#### DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	0	0	0	0	0	0	0	13	17	14	19
2	16	0	0	0	0	0	0	0	6.0	20	16	21
3	21	0	0	0	0	0	0	0	5.3	25	14	22
4	21	0	0	0	0	0	0	3.8	5.2	24	10	21
5	23	0	0	0	0	0	0	11	3.5	20	18	20
6	20	0	0	0	0	0	0	8.5	0	11	7.4	19
7	19	0	0	0	0	0	0	5.7	0	11	21	20
8	15	0	0	0	0	0	0	4.6	.76	8.9	17	22
9	20	0	0	0	0	0	0	4.5	7.0	11	12	23
10	20	0	0	0	0	0	0	5.2	6.3	10	13	25
11	22	0	0	0	0	0	0	4.3	7.4	15	13	17
12	22	0	0	0	0	0	0	6.4	5.8	15	14	18
13	22	0	0	0	0	0	0	7.0	6.7	12	14	19
14	21	0	0	0	0	0	0	6.6	7.5	14	12	17
15	19	0	0	0	0	0	0	9.0	9.1	13	11	19
16	12	0	0	0	0	0	0	6.9	11	10	13	19
17	1.7	0	0	0	0	0	0	7.8	11	12	13	20
18	0	0	0	0	0	0	0	8.1	14	16	18	20
19	1.2	0	0	0	0	0	0	6.5	5.1	12	23	16
20	0	0	0	0	0	0	0	7.4	3.3	12	21	15
21	0	0	0	0	0	0	0	13	7.9	11	20	14
22	0	0	0	0	0	0	0	16	7.6	10	16	13
23	0	0	0	0	0	0	0	13	6.2	13	18	14
24	0	0	0	0	0	0	1.7	11	4.2	15	15	15
25	0	0	0	0	0	0	1.8	10	10	14	13	16
26	0	0	0	0	0	0	0	12	13	11	18	16
27	0	0	0	0	0	0	0	13	14	11	20	20
28	0	0	0	0	0	0	0	14	12	19	12	21
29	0	0	0	0		0	0	16	15	12	11	20
30	0	0	0	0		0	0	16	14	12	14	19
31	0		0	0		0		14		13	16	
TOTAL	308.9	0	0	0	0	0	3.5	261.3	231.86	429.9	467.4	560
MEAN	9.96	0	0	0	0	0	.12	8.43	7.73	13.9	15.1	18.7
AC-FT	613	0	0	0	0	0	6.9	518	460	853	927	1110
MAX	23	0	0	0	0	0	1.8	16	15	25	23	25
MIN	0	0	0	0	0	0	0	0	0	8.9	7.4	13
CAL YR	2006	TOTAL	N/A	MEAN	N/A MAX	N/A	A MIN	N/A	AC-FT	N/A		
WTR YR	2007	TOTAL	2262.86	MEAN	6.2 MAX	25	5 MIN		AC-FT	4490		

MAX DISCH: 62.9 CFS AT 19:45 ON Aug. 5, 2007 GH 2.38 FT. SHIFT 0 FT. MAX GH: 2.38 FT. AT 19:45 ON Aug. 5, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

### STATELINE DITCH RETURN NEAR JULESBURG CO WY2007 HYDROGRAPH



### TRANSMOUNTAIN DIVERSIONS INTO THE SOUTH PLATTE BASIN IN COLORADO, WY 2007

WATER YEAR 2007 (October 2006 - September 2007)

FROM THE COLORADO RIV	FROM THE COLORADO RIVER BASIN												
	2006			2007									
NAME	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
Adams Tunnel*	4170	249	10815	15752	11290	15426	13278	4871	1749	10176	16347	13778	117,902
Berthoud Pass Ditch	0	0	0	0	0	0	0	0	175	142	42.8	2.80	363
Boreas Pass Ditch	0	0	0	0	0	0	0	0	61.1	33.3	0	0	94.4
Grand River Ditch	197	0	0	0	0	0	0	1900	5053	1969	761	421	10,301
A.P. Gumlick Tunnel**	0	0	0	0	0	0	0	0	0	0	0	0	0
Moffat Tunnel	1103	681	541	378	249	350	633	5662	5010	3630	1902	1712	21,851
Roberts Tunnel	2360	926	274	0	244	6.90	0	0	2446	9616	4789	206	20,868
Straight Creek Tunnel	6.21	5.70	5.89	5.89	5.32	5.89	5.70	15.8	33.3	11.9	6.96	5.52	114
Vidler Tunnel	0	0	0	0	0	0	0	0	265	95.6	0	0	360
TOTALS FROM THE COLORADO RIVER BASIN (DAY-CFS) 171,854													
TOTALS FROM THE COLORAL *West slope water only	OTALS FROM THE COLORADO RIVER BASIN (ACRE-FT)) 340,872												

FROM THE LARAMIE RIVER	RBASIN												
	2006			2007									
NAME	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
Bob Creek Ditch	0	0	0	0	0	0	0	104	58.4	0	0	0	162
Columbine Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0
Deadman Ditch	0	0	0	0	0	0	0	291	300	14.9	0	0	606
Laramie-Poudre Tunnel	0	0	0	0	0	0	0	2548	4774	1926	0	0	9,248
Skyline Ditch	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS FOR THE LARAMIE RIVER (DAY-CFS)  10,016													
TOTALS FOR THE LARAMIE R	IVER (	Acre Fee	et, 19875	AF per	CALEND	AR Year	Allowed	Under L	aramie R	iver Agre	eement)		19,867
	2006			2007									
	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
Wilson Supply Ditch (Gage)	0	0	0	0	0	0	0	1192	574	11.3	0	0	1,777
minus Deadman Ditch	0	0	0	0	0	0	0	291	300	14.9	0	0	606
= SAND CR. DIVERSION***	0	0	0	0	0	0	0	901	274	-3.59	0	0	1,171
*** Negative Numbers due to Deadman Ditch Losses													
TOTALS FROM THE LARAMIE RIVER BASIN (DAY-CFS)  11,187													
TOTALS FROM THE LARAMIE	RIVER BA	ASIN (AC	RE-FT)										22,190

FROM THE NORTH PLATTE	RIVER	BASIN											
	2006			2007									
NAME	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
Cameron Pass Ditch	0	0	0	0	0	0	0	2.27	45.0	0.49	0	0	47.7
Michigan Ditch	101	53.7	30.9	24.6	16.6	19.3	23.2	498	1206	504	220	146	2,844
									2,892				
TOTALS FROM THE NORTH P	LATTE R	TOTALS FROM THE NORTH PLATTE RIVER BASIN (DAY-CFS)  TOTALS FROM THE NORTH PLATTE RIVER BASIN (ACRE-FT)  5,736											

	2006			2007									
NAME	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
Hoosier Pass Tunnel *	7.00	51.5	0	0	0	1.15	91.9	1049	618	996	207	65.2	3,086
Aurora Homestake Pipeline**	976	762	1297	1240	1123	1197	1430	546	10.9	14.9	1218	0	9,815



#### PLATTE RIVER BASIN

#### AURORA HOMESTAKE PIPELINE ABOVE SPINNEY MOUNTAIN RESERVOIR

LOCATION. -- Lat 38°56'53", long 105°41'02", in Park County above Spinney Mountain Reservoir.

PERIOD OF RECORD.-1998 to present.

GAGE.--Two 36" venturi meters in a pipeline, equipped with satellite monitoring. The DCP, venturi meters and facilities are owned and maintained by the City of Aurora. The Sutron SatLink 2 DCP operated at low data rate (100 baud) until January 10, 2007, when the DCP was upgraded to high data rate HDR (100 to 300 baud). There are two meters — one is the main discharge to Spinney, and the other discharge valve is for pressure-relief (surge) on the pipeline. Both releases are monitored with the DCP and by the combined Aurora and City of Colorado Springs Supervisory Control and Data Acquisition (SCADA) system.

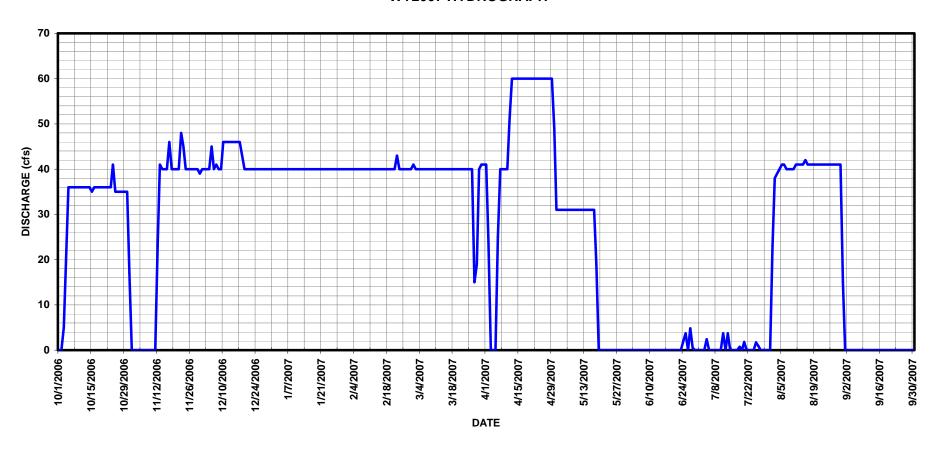
REMARKS.--The primary record is two sets of hourly discharges taken from satellite monitoring. Where DCP data were not available or reliable, values from the SCADA system accounting were used. After the SatLink 2 DCP was upgraded to HDR on Jan 10, 2007, programming errors upon decoding produced unreliable transmitted data for the period of Jan 10 - Sep 30, 2007. The DCP recorded correct hourly values and data downloaded directly from the DCP were used for the record. Missing data due to transmission errors were replaced by SCADA system values on Oct. 9-10, Dec 29-30, 2006, Jan 6, 8, 22, and Mar 11, 2007. The record must be regarded as fair until the meter is calibrated with discharge measurements. Record developed by Mike Wild.

DISCHARGE,	ΙN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007
			MEAN	J. T.A.T.I	IES				

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	40	40	40	41	41	31	0	0	23	0
2	0	0		40	40	40	24	31	0	0	38	0
3	5.0	0	40	40	40	40	0	31	0	0	39	0
4	20	0	40	40	40	40	0	31	0	2.4	40	0
5	36	0	45	40	40	40	0	31	0	0	41	0
6	36	0	40	40	40	40	25	31	0	0	41	0
7	36	0	41	40	40	40	40	31	0	0	40	0
8	36	0	40	40	40	40	40	31	0	0	40	0
9	36	0	40	40	40	40	40	31	0	0	40	0
10	36	0	46	40	40	40	40	31	0	0	40	0
11	36	0	46	40	40	40	51	31	0	3.7	41	0
12	36	23	46	40	40	40	60	31	0	0	41	0
13	36	41	46	40	40	40	60	31	0	3.7	41	0
14	36	40	46	40	40	40	60	31	0	0	41	0
15	35	40	46	40	40	40	60	31	0	0	42	0
16	36	40		40	40	40	60	31	0	0	41	0
17	36	46		40	40	40	60	31	0	0	41	0
18	36	40		40	40	40	60	19	0	.73	41	0
19	36	40		40	40	40	60	0	0	0	41	0
20	36	40		40	40	40	60	0	0	1.8	41	0
21	36	40		40	40	40	60	0	0	0	41	0
22	36	48		40	43	40	60	0	0	0	41	0
23	36	45		40	40	40	60	0	0	0	41	0
24	41	40		40	40	40	60	0	1.9	0	41	0
25	35	40		40	40	40	60	0	3.7	1.7	41	0
26	35	40		40	40	40	60	0	0	.88	41	0
27	35	40		40	40	15	60	0	4.8	0	41	0
28	35	40		40	40	19	60	0	.49	0	41	0
29	35	40		40		40	60	0	0	0	41	0
30	35	39		40		41	49	0	0	0	41	0
31	17		40	40		41		0		0	15	
TOTAL	976.0	762	1297	1240	1123	1197	1430	546	10.89	14.91	1218	0
MEAN	31.5	25.4	41.8	40.0	40.1	38.6	47.7	17.6	.36	.48	39.3	0
AC-FT	1940	1510	2570	2460	2230	2370	2840	1080	22	30	2420	0
MAX	41	48	46	40	43	41	60	31	4.8	3.7	42	0
MIN	0	0	40	40	40	15	0	0	0	0	15	0
CAL YR	2006	TOTAL	17908 MEAN	49.	1 MAX	81	MIN	0 AC	-FT	35520		
	2007	TOTAL	9815 MEAN	26.		60	MIN	0 AC		19470		

MAX DISCH: 120 CFS AT 22:59 ON Nov. 22, 2006

### AURORA HOMESTAKE PIPELINE ABOVE SPINNEY MOUNTAIN RESERVOIR CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### 09042000 EAST PORTAL HOOSIER PASS TUNNEL NEAR ALMA, CO

LOCATION.--Lat 39°21'33", long 106°04'37"; Park County, tunnel diverts water from tributaries of Blue River in Colorado River basin to Montgomery Res. (Middle Fork South Platte River) in sec. 14, T. 8 S., R. 78 W., in Platte River basin.

PERIOD OF RECORD. -- 1952 to present.

GAGE. -- Graphic water-stage recorder (weekly) and satellite monitoring (SatLink 2 high data rate DCP logger) at an 8-foot Parshall Flume with a metal stilling well. Flume and equipment are housed inside the tunnel entrance. Facilities are owned and maintained by the City of Colorado Springs. Satellite equipment is owned and maintained by DWR.

REMARKS.--The record is developed from hourly averages of 15-minute satellite data, with chart backup. The record is complete and reliable. Chart data were used to fill in missing or fauly shaft encoder data with no loss of accuracy. The record is good due to increased definition by measurements. The flow is controlled by numerous diversions into the tunnel inlet from the Blue River drainage. Station maintained and record developed by Garver Brown.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

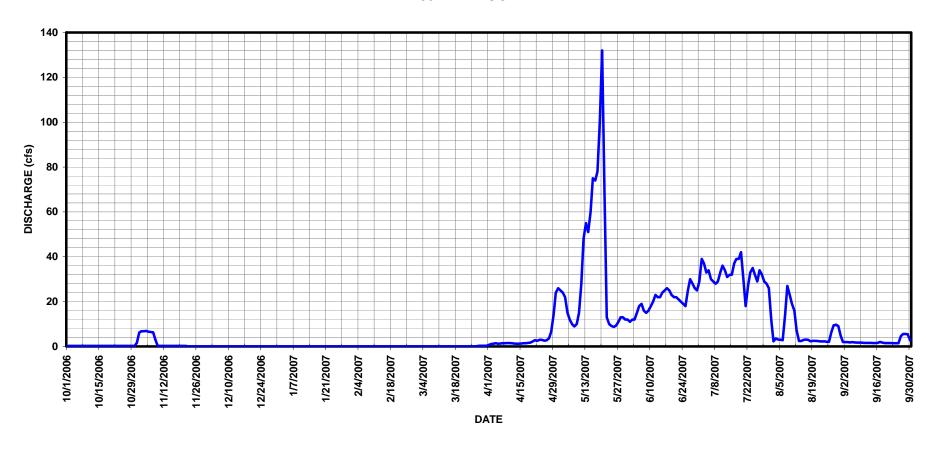
RATING TABLE. -- STD08FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

					N	MEAN VALU	JES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	6.2	0	0	0	0	.65	26	11	29	12	2.0
2	.18	6.8	0	0	0	0	1.1	25	12	39	2.3	1.9
3	.18	6.8	0	0	0	0	1.2	24	12	37	3.6	1.9
4	.18	6.9	0	0	0	0	1.4	22	15	33	3.1	1.8
5	.18	6.6	0	0	0	0	1.2	15	18	34	3.0	1.9
6	.18	6.4	0	0	0	0	1.3	12	19	30	2.8	1.8
7	.18	6.3	0	0	0	0	1.4	9.9	16	29	14	1.7
8	.18	3.0	0	0	0	0	1.4	8.9	15	28	27	1.7
9	.18	.21	0	0	0	0	1.5	10	16	29	23	1.7
10	.18	.18	0	0	0	0	1.5	15	18	33	19	1.6
11	.18	.18	0	0	0	0	1.4	28	20	36	16	1.6
12	.18	.18	0	0	0	0	1.3	48	23	34	7.2	1.6
13	.18	.18	0	0	0	0	1.2	55	22	31	2.4	1.6
14	.18	.18	0	0	0	0	1.2	51	22	32	2.4	1.5
15	.18	.18	0	0	0	0	1.3	60	24	32	2.9	1.5
16	.18	.18	0	0	0	0	1.4	75	25	37	3.1	1.6
17	.18	.18	0	0	0	0	1.4	74	26	39	2.9	2.0
18	.18	.18	0	0	0	0	1.6	78	25	39	2.3	1.7
19	.18	.18	0	0	0	0	1.7	101	23	42	2.5	1.5
20	.18	.18	0	0	0	0	2.2	132	22	30	2.5	1.5
21	.18	.18	0	0	0	0	2.8	68	22	18	2.4	1.5
22	.18	.10	0	0	0	0	2.5	13	21	27	2.3	1.5
23	.18	0	0	0	0	0	3.0	10	20	33	2.2	1.4
24	.18	0	0	0	0	0	2.9	9.1	19	35	2.3	1.4
25	.18	0	0	0	0	0	2.6	8.7	18	32	2.1	1.4
26	.18	0	0	0	0	0	2.7	9.3	25	29	2.1	4.6
27	.18	0	0	0	0	.11	3.6	11	30	34	6.4	5.6
28	.18	0	0	0	0	.26	6.4	13	28	32	9.4	5.6
29	.18	0	0	0		.26	14	13	26	29	9.6	5.4
30	.18	0	0	0		.26	24	12	25	28	9.1	2.7
31	1.6		0	0		.26		12		26	4.8	
TOTAL	7.00	51.47	0	0	0	1.15	91.85	1048.9	618	996	206.7	65.2
MEAN	.23	1.72	0	0	0	.037	3.06	33.8	20.6	32.1	6.67	2.17
AC-FT	14	102	0	0	0	2.3	182	2080	1230	1980	410	129
MAX	1.6	6.9	0	0	0	.26	24	132	30	42	27	5.6
MIN	.18	0	0	0	0	0	.65	8.7	11	18	2.1	1.4
CAL YR	2006		6132 ME			125	MIN	0 AC-		12160		
WTR YR	2007	TOTAL 3	3086 ME	AN 8.46	MAX	132	MIN	0 AC-	FT	6120		

MAX DISCH: 159 CFS AT 23:30 ON May. 19, 2007 GH 2.71 FT. SHIFT 0 FT. MAX GH: 2.71 FT. AT 23:30 ON May. 19, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 09042000 EAST PORTAL HOOSIER PASS TUNNEL NEAR ALMA CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### 09046000 BOREAS PASS DITCH AT BOREAS PASS, CO

LOCATION.--Lat 39°24'37", long 105°58'05". Diverts water from tributaries of Blue River in Colorado River basin to Tarryall Creek in sec. 26, T.7 S., R.77 W., in Platte River basin.

PERIOD OF RECORD.--Gage established in 1932, with continuous record from 1950 to present, and for some years prior to 1950.

GAGE. -- Sutron Satlink 2 Data Collection Platform (DCP), Sutron Stage Discharge Recorder (SDR), and a photovoltaic battery charging system at an 18-inch Parshall Flume with a metal stilling well. The ditch goes underground after collection, and the flume and equipment are housed inside a manhole. The flume is set into the concrete pipeline, approximately 14 ft. underground. A staff gage in the flume is used as the primary reference gage. The gage and equipment are owned by the City of Englewood. The DCP and ditch gates are operated by an independent contractor under a special contract arrangement with Englewood.

REMARKS.--The primary record is hourly averages of 15-minute satellite data. A Sutron SDR is utilized for data backup. The gage was operated and satellite data were collected from June 2 to July 26, 2007. The gage was visited 12 times during the 2007 water year. The record is complete and reliable. The record is good. The gage is seasonal and runs typically from May/June to August. Record developed by Mike Wild.

RATING TABLE. -- STD01HFTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

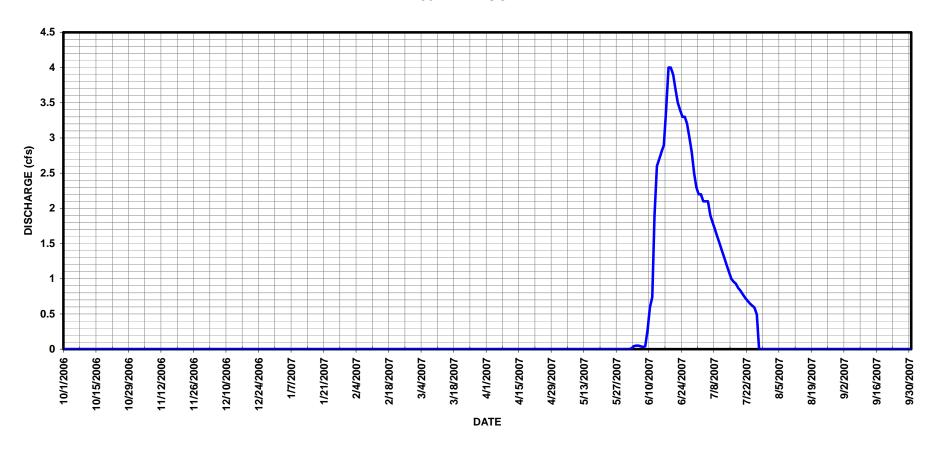
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
2       0	1	0	0	0	0	0	0	0	0	0	2.2	0	0
4       0	2	0	0	0	0	0	0	0	0	.01		0	0
5     0 <td>3</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>.04</td> <td>2.1</td> <td>0</td> <td>0</td>	3	0	0	0	0	0	0	0	0	.04	2.1	0	0
6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1.9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4	0	0	0	0	0	0	0	0	.05	2.1	0	0
7 0 0 0 0 0 0 0 0 0 0 0 0 0 1.8 0 0 0 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5	0	0	0	0	0	0	0	0	.05	2.1	0	0
8 0 0 0 0 0 0 0 0 0 0 0 0 1.7 0 0 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6	0	0	0	0	0	0	0	0	.04	1.9	0	0
9 0 0 0 0 0 0 0 0 0 .28 1.6 0 0 10 0 0 0 0 .59 1.5 0	7	0	0	0	0	0	0	0	0	.03	1.8	0	0
10 0 0 0 0 0 0 0 0 .59 1.5 0	8	0	0	0	0	0	0	0	0	.04	1.7	0	0
	9	0	0	0	0	0	0	0	0	.28	1.6	0	0
	10	0	0	0	0	0	0	0	0	.59	1.5	0	0
	11	0	0	0	0	0	0	0	0	.74	1.4	0	0
12 0 0 0 0 0 0 0 0 1.9 1.3 0	12	0	0	0	0	0	0	0	0	1.9	1.3	0	0
13 0 0 0 0 0 0 0 0 0 2.6 1.2 0	13	0	0	0	0	0	0	0	0	2.6	1.2	0	0
			0	0	0	0	0	0	0			0	0
		0	0	0	0	0	0	0	0			0	0
			0	-	0	0	•	0	-				0
= · · · · · · · · · · · · · · · · · · ·		0	0	0	0	0	0	0	0			0	0
				•		-	•	-					0
						-	O .	-					0
				-			-	-					0
		-	-	-	-	-	-	-	-			-	0
							-						0
							-						0
				-	-	-	-	-					0
						-	-	-					0
				-		-	-						0
													0
			-	-	-	0	-	-				-	0
							-	-					0
			0										0
31 0 0 0 0 0 0	31	0		0	0		0		0		0	0	
TOTAL 0 0 0 0 0 0 0 0 0 61.07 33.34 0	TOTAL	0	0	0	0	0	0	0	0	61.07	33.34	0	0
		0	0		0	0	0	0				0	0
	AC-FT	0	0	0	0	0	0	0	0			0	0
		0	0	0	0	0	0	0	0			0	0
													0
CAL YR 2006 TOTAL 93.69 MEAN .26 MAX 3.1 MIN 0 AC-FT 186	CAL YR	2006	TOTAL	93.69 MEA	N	.26 MAX	3	.1 MIN	0	AC-FT	186		
WTR YR 2007 TOTAL 94.41 MEAN .26 MAX 4 MIN 0 AC-FT 187	WTR YR	2007	TOTAL		N		4	MIN	0	AC-FT			

MAX DISCH: 4.5 CFS AT 09:00 ON Jun. 18, 2007 GH 0.87 FT. SHIFT -0.04 FT. MAX GH: 0.87 FT. AT 09:00 ON Jun. 18, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

### 09046000 BOREAS PASS DITCH AT BOREAS PASS CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### 09050590 HAROLD D. ROBERTS TUNNEL NEAR GRANT, CO

LOCATION.--Lat 39°27'50", long 105°41'01"; Harold D. Roberts tunnel diverts water from Dillon Reservoir in Blue River basin, to North Fork South Platte River (tributary to South Platte River) in SW4SW4 sec. 4, T. 7 S., R. 74 W., in Platte River basin.

PERIOD OF RECORD. -- 1963 to present.

GAGE.--A Stevens 2A-35 graphic stage recorder, shaft encoder and high data rate Sutron 8210 DCP with digital shaft encoder in a concrete shelter and well at a 20-ft. Parshall Flume. Primary reference gage is an electric tape gage. Station is owned and maintained by the Denver Water Dept., who also generate power from the tunnel flow.

REMARKS.--The primary record is hourly averages of 15-minute satellite data with chart backup. It is complete and reliable. The recording equipment functions well and is considered reliable during cold weather due to a heat lamp installed within the shelter and well. During zero-flow periods, there is a residual gage height due to standing water in the well & flume. (The inlet is slightly above the floor of the flume, and dead moss traps patches of water in the flume.) The level seems to vary from .05 ft to 0.15 ft. Denver Water Board Department records were used to verify periods of zero flow. The record is rated as good. Station maintained and record developed by Mike Wild.

RATING TABLE. -- STD20FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

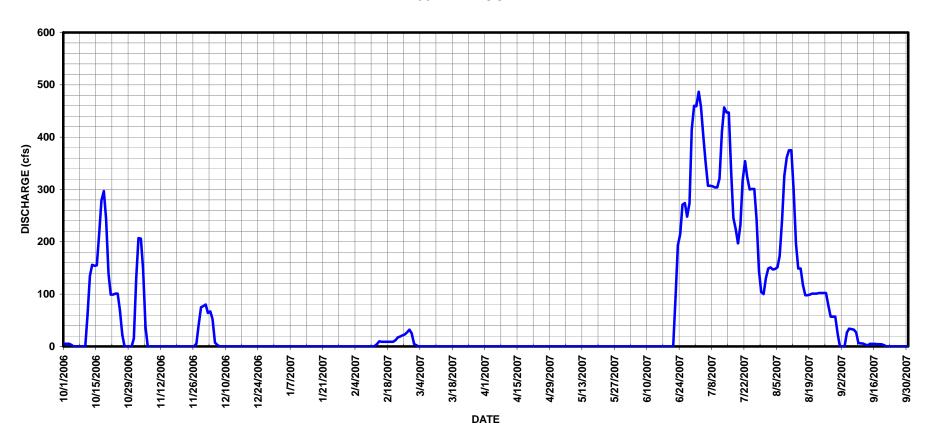
# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	131	80	0	0	4.9	0	0	0	459	149	0
2	4.8	207	64	0	0	2.0	0	0	0	487	151	0
3	5.3	206	67	0	0	0	0	0	0	458	147	0
4	2.8	147	52	0	0	0	0	0	0	401	148	27
5	0	37	7.4	0	0	0	0	0	0	352	151	34
6	0	0	3.1	0	0	0	0	0	0	307	173	33
7	0	0	0	0	0	0	0	0	0	307	242	32
8	0	0	0	0	0	0	0	0	0	306	326	27
9	0	0	0	0	0	0	0	0	0	304	361	6.3
10	0	0	0	0	0	0	0	0	0	304	375	5.8
11	60	0	0	0	0	0	0	0	0	321	375	5.6
12	135	0	0	0	.62	0	0	0	0	410	300	3.5
13	156	0	0	0	4.6	0	0	0	0	457	196	2.1
14	154	0	0	0	9.7	0	0	0	0	447	149	5.0
15	155	0	0	0	9.0	0	0	0	0	447	149	4.9
16	216	0	0	0	8.8	0	0	0	0	332	118	4.9
17	279	0	0	0	8.8	0	0	0	0	246	98	4.4
18	297	0	0	0	8.8	0	0	0	0	224	98	4.2
19	244	0	0	0	8.8	0	0	0	0	197	99	4.1
20	140	0	0	0	8.8	0	0	0	0	232	101	2.5
21	99	0	0	0	12	0	0	0	0	317	101	0
22	99	0	0	0	17	0	0	0	96	354	101	0
23	101	0	0	0	19	0	0	0	193	323	102	0
24	101	0	0	0	21	0	0	0	215	300	102	0
25	69	0	0	0	23	0	0	0	271	301	102	0
26	22	0	0	0	27	0	0	0	274	301	102	0
27	0	5.3	0	0	32	0	0	0	248	243	78	0
28	0	41	0	0	25	0	0	0	274	145	57	0
29	0	75	0	0		0	0	0	415	104	57	0
30	0	77	0	0		0	0	0	460	100	57	0
31	15		0	0		0		0		130	24	
TOTAL	2360.2	926.3	273.5	0	243.92	6.9	0	0	2446	9616	4789	206.3
MEAN	76.1	30.9	8.82	0	8.71	.22	0	0	81.5	310	154	6.88
AC-FT	4680	1840	542	0	484	14	0	0	4850	19070	9500	409
MAX	297	207	80	0	32	4.9	0	0	460	487	375	34
MIN	0	0	0	0	0	0	0	0	0	100	24	0
CAL YR	2006	TOTAL 5	4270.9 ME	EAN	149 MAX	593	MIN	0	AC-FT	107600		
WTR YR	2007	TOTAL 2	0868.12 ME	EAN	57.2 MAX	487	MIN	0	AC-FT	41390		

MAX DISCH: 505 CFS AT 10:00 ON Jul. 2, 2007 GH 3.2 FT. SHIFT 0.06 FT. MAX GH: 3.2 FT. AT 10:00 ON Jul. 2, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 09050590 HAROLD D. ROBERTS TUNNEL NEAR GRANT CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### STRAIGHT CREEK TUNNEL AT EAST PORTAL EISENHOWER TUNNEL

LOCATION.--Lat 39°40'45", long 105°54'10", NE1/4, sec. 28, T1S, R71W. Manhole is located in the East Portal CDOT parking lot between the East and West bound traffic lanes of Interstate 70.

DRAINAGE AREA. -- Eisenhower Tunnel seepage with effluent from sewage treatment facility.

GAGE.--A 12-inch Parshall Flume located in a manhole-vault in the CDOT parking lot between eastbound and westbound lanes of I-70. The tunnel pipeline is approximately 12 ft. underground. There is a condensing environment in the tunnel; the moisture has destroyed electronic and electrical equipment placed there previously. Most metal objects are corroded. The air is of poor quality within the tunnel. A Sutron stage discharge recorder (SDR) was installed on Aug 1, 2007 to better monitor flow conditions in the tunnel. The SDR was placed in a NEMA enclosure and mounted on the REW of the flume.

REMARKS.--SDR record (5 minute data) exists from August 1 to the end of the water year. For October-July, GH's were estimated from visits made by Employees of Coors. Gage height readings were made on the following days: September 30, 2006; November 1, 2006; May 6, 26, June 9, and July 21, 2007. The parking lot is covered with ice in the winter and such readings are not made. For October through July, the record is estimated and poor. For August and September, the record is fair due to the accuracy of measurement for shallow depths. This record is requested by DWR Division 5 and the Upper Colorado River Commission to complete their accounting of transmountain diversions. Record developed by Steve Barrett.

RATING TABLE. -- STD01FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.19	.19	.19	.19	.19	.19	.19	1.1	.71	.25	.20
2	.21	.19	.19	.19	.19	.19	.19	.19	1.1	.68	.28	.21
3	.21	.19	.19	.19	.19	.19	.19	.19	1.2	.64	.26	.22
4	.21	.19	.19	.19	.19	.19	.19	.19	1.2	.61	.24	.21
5	.21	.19	.19	.19	.19	.19	.19	.19	1.3	.58	.25	.21
6	.21	.19	.19	.19	.19	.19	.19	.19	1.3	.55	.25	.21
7	.21	.19	.19	.19	.19	.19	.19	.19	1.4	.55	.26	.19
8	.21	.19	.19	.19	.19	.19	.19	.21	1.4	.52	.23	.19
9	.21	.19	.19	.19	.19	.19	.19	.21	1.4	.49	.22	.19
10	.21	.19	.19	.19	.19	.19	.19	.21	1.4	.46	.21	.19
11	.21	.19	.19	.19	.19	.19	.19	.21	1.4	.43	.21	.19
12	.21	.19	.19	.19	.19	.19	.19	.23	1.3	.40	.21	.19
13	.21	.19	.19	.19	.19	.19	.19	.28	1.3	.38	.23	.19
14	.21	.19	.19	.19	.19	.19	.19	.30	1.2	.38	.21	.18
15	.21	.19	.19	.19	.19	.19	.19	.35	1.2	.35	.21	.19
16	.21	.19	.19	.19	.19	.19	.19	.40	1.2	.33	.21	.19
17	.19	.19	.19	.19	.19	.19	.19	.43	1.1	.30	.22	.21
18	.19	.19	.19	.19	.19	.19	.19	.49	1.1	.28	.22	.17
19	.19	.19	.19	.19	.19	.19	.19	.55	1.1	.28	.22	.17
20	.19	.19	.19	.19	.19	.19	.19	.61	1.0	.25	.21	.17
21	.19	.19	.19	.19	.19	.19	.19	.68	.99	.25	.21	.17
22	.19	.19	.19	.19	.19	.19	.19	.71	.95	.25	.21	.17
23	.19	.19	.19	.19	.19	.19	.19	.78	.95	.25	.21	.18
24	.19	.19	.19	.19	.19	.19	.19	.85	.92	.25	.25	.18
25	.19	.19	.19	.19	.19	.19	.19	.92	.88	.25	.21	.17
26	.19	.19	.19	.19	.19	.19	.19	.95	.85	.25	.21	.16
27	.19	.19	.19	.19	.19	.19	.19	.95	.81	.25	.22	.16
28	.19	.19	.19	.19	.19	.19	.19	.99	.78	.25	.21	.15
29	.19	.19	.19	.19		.19	.19	1.0	.74	.25	.22	.15
30	.19	.19	.19	.19		.19	.19	1.1	.74	.25	.21	.16
31	.19		.19	.19		.19		1.1		.25	.20	
TOTAL	6.21	5.70	5.89	5.89	5.32	5.89	5.70	15.84	33.31	11.92	6.96	5.52
MEAN	.20	.19	.19	.19	.19	.19	.19	.51	1.11	.38	.22	.18
AC-FT	12	11	12		11	12	11	31	66	24	14	11
MAX	.21	.19	.19	.19	.19	.19	.19	1.1	1.4	.71	.28	.22
MIN	.19	.19	.19	.19	.19	.19	.19	.19	.74	.25	.20	.15
CAL YR	2006	TOTAL	171.49	MEAN	.47 MAX	2.	1 MIN	.29	AC-FT	340		

MAX DISCH: 1.39 CFS AT 12:00 ON Jun. 9, 2007 GH 0.57 FT. SHIFT -0.06 FT. MAX GH: 0.57 FT. AT 12:00 ON Jun. 9, 2007

.31 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

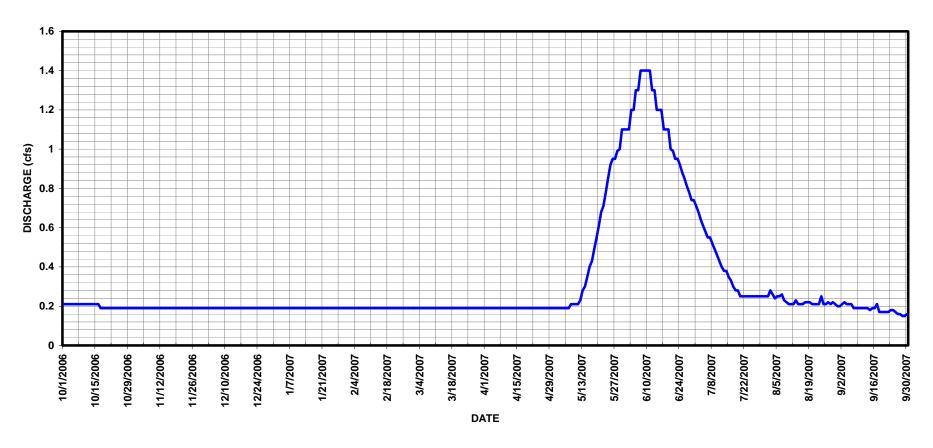
TOTAL 114.15 MEAN

WTR YR 2007

1.4 MIN

.15 AC-FT

# STRAIGHT CREEK TUNNEL AT EAST PORTAL EISENHOWER TUNNEL WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

A.P. GUMLICK TUNNEL (aka JONES PASS TUNNEL) RELEASE TO CLEAR CREEK NEAR JONES PASS, CO

LOCATION.--Lat. 39°46'13", Long. 105°51'03"; in SW1/4, Sec. 24, T3S, R76W. Two miles east of Jones Pass at Henderson Mine, 11 miles west of Empire, Colorado. Diversion is from tributaries of the Williams Fork River in the Colorado River Basin. Since July, 1959, Gumlick water has been rediverted into Vasquez Tunnel to Vasquez Creek in the Frazier River and Colorado River basins. Gumlick Tunnel flows may be released into Clear Creek and must be accounted for as a separate trans-mountain diversion from the Colorado River Basin to the South Platte Basin.

DRAINAGE AREA AND PERIOD OF RECORD.--N/A; WY2006 is first year of published record.

GAGE.--Gumlick Tunnel water emerges on the East Slope into a covered canal. A radial gate allows flow from an 8X8 ft. opening in the canal side into the West Fork of Clear Creek drainage. Stevens Type F graphic water stage recorder at 10 Ft. Parshall Flume with 5 ft. walls, in a square concrete shelter with a 12" stilling well. The gage is set to an outside staff gage on the flume. Datum of gage is 10,312.5 ft.

REMARKS.--The record is chart based. The charts are maintained by Denver Water personnel. No water was run, so no charts were sent by Denver. No flow for WY2007. This gage is an infrequently used transmountain diversion owned by the City of Denver and used to deliver water to Clear Creek in Division One. Water was run last year so totals for the 2006 Calendar year were entered on the yearly summary sheet. Record developed by Bob Cooper.

RATING TABLE. -- STD10FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

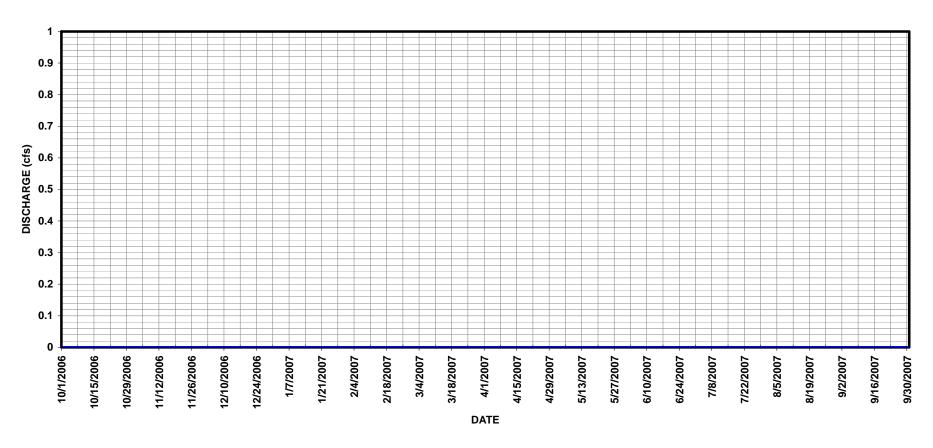
# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0		0	0	0	0	0	0	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0		0	0		0		0		0	0	
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	0	0	0
MAX	0	0	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR	2006	TOTAL	1277 MEA	N	3.5 MAX	140	MIN		AC-FT	2530		
WTR YR	2007	TOTAL	0 MEA	N	0 MAX	0	MIN	0	AC-FT	0		

MAX DISCH: 0 CFS AT 00:00 ON N/A GH N/A FT. SHIFT 0 FT. MAX GH: 0 FT. AT 00:00 ON N/A

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# A.P. GUMLICK TUNNEL (aka JONES PASS TUNNEL) RELEASE TO CLEAR CREEK NEAR JONES PASS CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### 09047300 VIDLER TUNNEL NEAR ARGENTINE PASS, CO

LOCATION.--Lat 39°37'28", long 105°47'28", sec.6, T.5 S., R.75 W., Summit County, at Argentine Pass above Keystone Ski Area.

DRAINAGE AREA AND PERIOD OF RECORD. -- N/A; 1971 to present.

GAGE.--Stevens F-type recorder and digital shaft encoder mounted on a prefabricated steel three-foot Parshall Flume. The flume is inside the tunnel, approximately 320 feet from the DCP. The primary reference is the flume staff. Data are logged and transmitted by a Satlink 2 high data rate data collection platform connected to a high-resolution shaft encoder.

REMARKS.--The primary record is hourly averages of 15-minute satellite data or DCP log data with chart backup. The record is complete and reliable. Chart data were use to fill in missing DCP data on several dates without loss of accuracy. During the period: July 19-24, 2007, a gage height correction was applied to compensate for the shaft encoder being reset to zero by an electric surge most likely caused by lightning with no loss of accuracy. The record is considered good. Station maintained and record developed by Mike Wild.

RATING TABLE.--VIDTUNCO02 USED FROM 01-OCT-2007 TO 30-SEP-2007

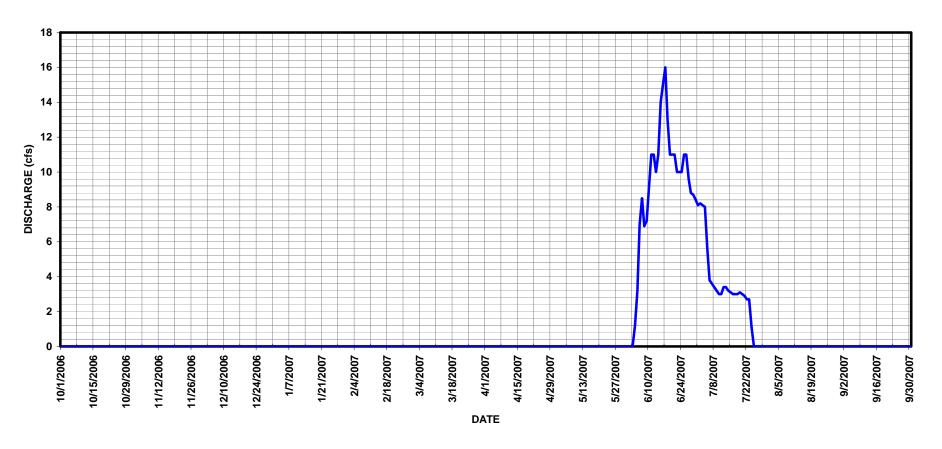
# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	8.1	0	0
2	0	0	0	0	0	0	0	0	0	8.2	0	0
3	0	0	0	0	0	0	0	0	0	8.1	0	0
4	0	0	0	0	0	0	0	0	1.2	8.0	0	0
5	0	0	0	0	0	0	0	0	3.2	5.6	0	0
6	0	0	0	0	0	0	0	0	7.0	3.8	0	0
7	0	0	0	0	0	0	0	0	8.5	3.6	0	0
8	0	0	0	0	0	0	0	0	6.9	3.4	0	0
9	0	0	0	0	0	0	0	0	7.2	3.2	0	0
10	0	0	0	0	0	0	0	0	9.2	3.0	0	0
11	0	0	0	0	0	0	0	0	11	3.0	0	0
12	0	0	0	0	0	0	0	0	11	3.4	0	0
13	0	0	0	0	0	0	0	0	10	3.4	0	0
14	0	0	0	0	0	0	0	0	11	3.2	0	0
15	0	0	0	0	0	0	0	0	14	3.1	0	0
16	0	0	0	0	0	0	0	0	15	3.0	0	0
17	0	0	0	0	0	0	0	0	16	3.0	0	0
18	0	0	0	0	0	0	0	0	13	3.0	0	0
19	0	0	0	0	0	0	0	0	11	3.1	0	0
20	0	0	0	0	0	0	0	0	11	3.0	0	0
21	0	0	0	0	0	0	0	0	11	2.9	0	0
22	0	0	0	0	0	0	0	0	10	2.7	0	0
23	0	0	0	0	0	0	0	0	10	2.7	0	0
2.4	0	0	0	0	0	0	0	0	10	1.1	0	0
25	0	0	0	0	0	0	0	0	11	0	0	0
26	0	0	0	0	0	0	0	0	11	0	0	0
27	0	0	0	0	0	0	0	0	9.6	0	0	0
28	0	0	0	0	0	0	0	0	8.8	0	0	0
29	0	0	0	0		0	0	0	8.7	0	0	0
30 31	0	0	0	0		0	0	0	8.4	0	0	0
31	0		0	0		U		0		0	0	
TOTAL	0	0	0	0	0	0	0	0	264.7	95.6	0	0
MEAN	0	0	0	0	0	0	0	0	8.82	3.08	0	0
AC-FT	0	0	0	0	0	0	0	0	525	190	0	0
MAX	0	0	0	0	0	0	0	0	16	8.2	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR	2006	TOTAL	316.3 MEAN		.87 MAX	16	MIN	0	AC-FT	627		
WTR YR	2007	TOTAL	360.3 MEAN		.99 MAX	16		0	AC-FT	715		

MAX DISCH: 19.6 CFS AT 18:00 ON Jun. 17, 2007 GH 1.42 FT. SHIFT -0.05 FT. MAX GH: 1.42 FT. AT 18:00 ON Jun. 17, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 09047300 VIDLER TUNNEL NEAR ARGENTINE PASS CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### 09021500 BERTHOUD PASS DITCH AT BERTHOUD PASS, CO

LOCATION.--Lat 39°47'56", long 105°46'36" in SW1/4, sec. 10, T3S, R75W. Berthoud Pass Ditch diverts water from tributaries of Fraser River between headgate in sec. 33, T. 2 S., R. 75 W., Grand County, and Berthoud Pass, in Colorado River basin, to Hoop Creek, tributary to west fork Clear Creek in sec. 10, T3S, R75W, in Platte River Basin.

PERIOD OF RECORD. -- July 1932 to present.

GAGE.—A high data rate Satlink II data collection platform (DCP) and shaft encoder inside a 42-inch metal shelter and well at a 30 inch by 9 ft. cutthroat flume. The stilling well has been divided to accommodate two recorders, one for Ha and one for Hb. Primary reference gage is drop tape. Staff. There is a staff gage in the flume at the Ha position, but no reference for Hb. The gage is owned and operated by the city of Northglenn. A new tape was made for the gage in June 2007.

REMARKS.-- The primary record is hourly DCP data with no chart back-up. The record is complete and reliable with no missing data, except June 5, 2007 is a partial record day as the gage height record is unknown before the DCP was turned on at 9:15. The record is considered good, except June 5, 2007, which is estimated and poor. Station maintained and record developed by Steve Barrett.

RATING TABLE.--BERDITCO01 USED FROM 01-OCT-2006 TO 30-SEPT-2007

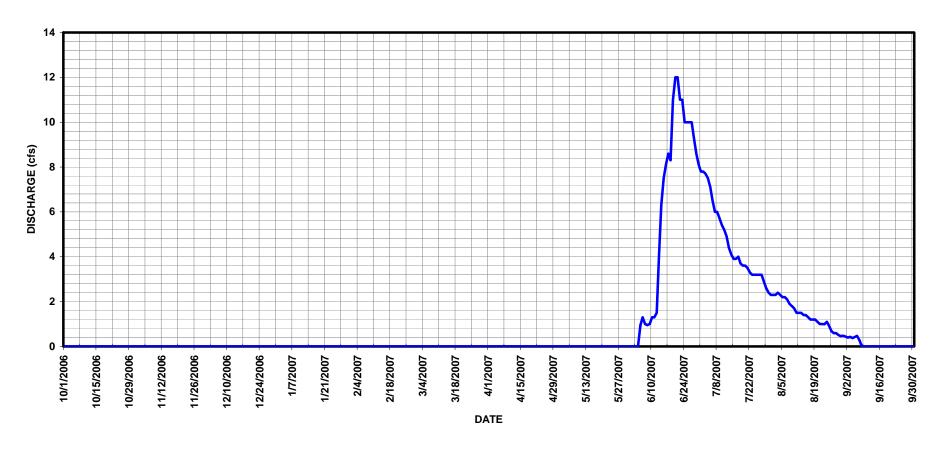
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	7.8	2.3	.44
2	0	0	0	0	0	0	0	0	0	7.8	2.3	.39
3	Ō	Ō	Ö	Ö	0	Ō	Ō	Ō	Ō	7.7	2.4	.43
4	0	0	0	0	0	0	0	0	0	7.5	2.3	.37
5	0	0	0	0	0	0	0	0	.94	7.1	2.2	.42
6	0	0	0	0	0	0	0	0	1.3	6.5	2.2	.47
7	0	0	0	0	0	0	0	0	1.0	6.0	2.1	.28
8	0	0	0	0	0	0	0	0	.95	6.0	1.9	0
9	0	0	0	0	0	0	0	0	1.0	5.7	1.8	0
10	0	0	0	0	0	0	0	0	1.3	5.4	1.7	0
11	0	0	0	0	0	0	0	0	1.3	5.2	1.5	0
12	0	0	0	0	0	0	0	0	1.5	4.9	1.5	0
13	0	0	0	0	0	0	0	0	4.0	4.4	1.5	0
14	0	0	0	0	0	0	0	0	6.3	4.1	1.4	0
15	0	0	0	0	0	0	0	0	7.5	3.9	1.4	0
16	0	0	0	0	0	0	0	0	8.1	3.9	1.3	0
17	0	0	0	0	0	0	0	0	8.6	4.0	1.2	0
18	0	0	0	0	0	0	0	0	8.3	3.7	1.2	0
19	0	0	0	0	0	0	0	0	11	3.6	1.2	0
20	0	0	0	0	0	0	0	0	12	3.6	1.1	0
21	0	0	0	0	0	0	0	0	12	3.5	1.0	0
22	0	0	0	0	0	0	0	0	11	3.3	1.0	0
23	0	0	0	0	0	0	0	0	11	3.2	.99	0
24	0	0	0	0	0	0	0	0	10	3.2	1.1	0
25	0	0	0	0	0	0	0	0	10	3.2	.91	0
26	0	0	0	0	0	0	0	0	10	3.2	.68	0
27	0	0	0	0	0	0	0	0	10	3.2	.59	0
28	0	0	0	0	0	0	0	0	9.3	2.9	.59	0
29	0	0	0	0		0	0	0	8.6	2.6	.51	0
30	0	0	0	0		0	0	0	8.1	2.4	.46	0
31	0		0	0		0		0		2.3	.48	
TOTAL	0	0	0	0	0	0	0	0	175.09	141.8	42.81	2.80
MEAN	0	0	0	0	0	0	0	0	5.84	4.57	1.38	.093
AC-FT	0	0	0	0	0	0	0	0	347	281	85	5.6
MAX	0	0	0	0	0	0	0	0	12	7.8	2.4	.47
MIN	0	0	0	0	0	0	0	0	0	2.3	.46	0
CAL YR	2006	TOTAL	422.9 MEAN		1.16 MAX		9.2 MIN	0	AC-FT	839		
WTR YR	2007	TOTAL	362.5 MEAN		0.99 MAX		12 MIN	Ō		719		

MAX DISCH: 13.9 CFS AT 15:00 ON Jun. 19, 2007 GH 1.35 FT. SHIFT -0.03 FT. MAX GH: 1.35 FT. AT 15:00 ON Jun. 19, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 09021500 BERTHOUD PASS DITCH AT BERTHOUD PASS CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### 09022500 EAST PORTAL MOFFAT TUNNEL NEAR ROLLINSVILLE, CO

LOCATION.--Lat 39°54'07", long 105°38'44"; in SW1/4, sec. 2, T2S, R74W. Diverts water from tributaries of William's Fork River and main stem and tributaries of Fraser River in Colorado River basin, to South Boulder Creek, in sec. 2, T2S, R74W, in Platte River basin, Gilpin County.

DRAINAGE AREA AND PERIOD OF RECORD. -- N/A; June 1936 to present.

GAGE.--Graphic water-stage recorder and satellite telemetry in a timber shelter at a concrete stilling well and 15-foot Parshall Flume. A High Data Rate Sutron 8210 having logging capability as well as telephone line access. Electric tape gage is the primary reference gage.

REMARKS.--Primary record is hourly averages of 15-minute satellite data with chart backup. The record is complete and reliable, except for Nov 30 - Dec 1, 2006, due to ice in the well. Mean daily gage heights were taken from the charts on days where satellite data was missing and the range in stage was negligible. The flume is generally not subject to ice as the water was still warm from the tunnel. The graphic chart is changed weekly by Denver Water Department. Record is good, with exception of Nov 30 - Dec 1, 2006, which have been estimated and are considered poor. Station maintained and record developed by Steve Barrett.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

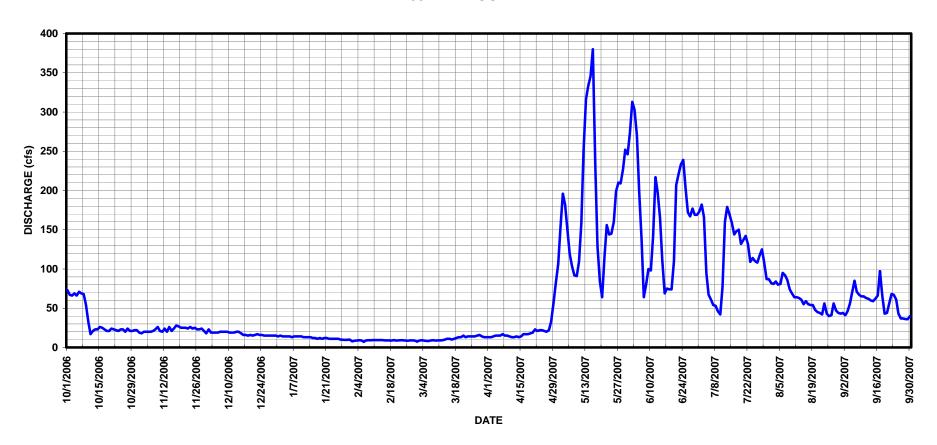
RATING TABLE. -- STD15FTPF USED FROM 01-OCT-2006 TO 30-SEPT-2007

					ME	CAN VALUES	3					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	19	23	15	7.7	7.6	13	106	273	173	82	44
2	67	18	19	14	8.5	8.7	13	152	313	182	81	41
3	66	20	19	14	8.8	9.1	14	196	303	166	84	46
4	69	20	19	14	9.1	8.8	15	182	270	95	80	56
5	66	20	19	14	9.0	8.4	15	149	199	67	81	70
6	71	20	20	13	7.2	8.1	15	119	138	61	95	85
7	69	21	20	14	8.9	8.9	17	103	64	54	92	71
8	68	23	20	14	9.1	9.1	15	92	81	53	86	67
9	55	26	20	14	9.1	8.7	15	91	100	46	74	65
10	33	21	19	14	9.3	8.9	14	109	98	42	69	65
11	17	20	19	13	9.3	8.9	13	158	141	77	64	63
12	21	24	19	13	9.3	9.2	13	251	217	160	64	62
13	23	20	20	13	9.3	10	14	316	197	179	63	60
14	23	26	20	13	9.3	11	13	333	165	169	61	59
15	26	21	18	12	8.9	11	14	346	111	159	55	62
16	25	24	16	12	8.9	10	17	380	69	144	59	66
17	23	28	16	11	9.0	11	17	235	75	148	55	97
18	21	27	15	12	8.8	12	17	129	74	150	54	65
19	21	25	16	11	9.3	13	18	84	74	132	54	43
20	24	25	15	12	8.8	13	19	64	110	137	48	44
21	23	25	16	12	8.9	15	23	116	207	142	45	56
22	22	24	17	11	9.2	13	21	156	221	131	44	68
23	21	26	16	11	9.2	14	22	144	233	109	42	67
24	23	24	16	11	8.7	14	22	145	239	114	56	61
25	23	25	15	11	8.5	14	21	160	204	110	43	43
26	20	23	15	11	9.0	14	20	199	172	108	40	37
27	24	23	15	10	9.0	15	22	210	167	117	41	37
28	21	24	15	9.7	8.7	16	33	209	177	125	56	36
29	21	21	15	9.6		14	57	227	169	108	47	36
30	22	18	15	9.8		13	82	252	169	87	44	40
31	22		14	9.9		13		246		87	43	
TOTAL	1103	681		378.0	248.8	350.4	624	5659	5030	3632	1902	1712
MEAN	35.6	22.7		12.2	8.89	11.3	20.8	183	168	117	61.4	57.1
AC-FT	2190	1350		750	493	695	1240	11220	9980	7200	3770	3400
MAX	73	28		15	9.3	16	82	380	313	182	95	97
MIN	17	18	14	9.6	7.2	7.6	13	64	64	42	40	36
CAL YR	2006	TOTAL	41417.7	MEAN	113 MAX	870		9.6	AC-FT	82150		
WTR YR	2007	TOTAL	21861.2	MEAN	59.9 MAX	380	) MIN	7.2	AC-FT	43360		

MAX DISCH: 483 CFS AT 21:25 ON May. 15, 2007 GH 3.73 FT. SHIFT 0.04 FT. MAX GH: 3.73 FT. AT 21:25 ON May. 15, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 09022500 EAST PORTAL MOFFAT TUNNEL NEAR ROLLINSVILLE CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

09013000 ALVA B. ADAMS TUNNEL (NET) AT EAST PORTAL NEAR ESTES PARK, CO

LOCATION.--Lat 40°19'40", long 105°34'39", in NW4 sec. 9, T.3 N., R.75 W.

GAGE. -- Alva B. Adam's Tunnel (Net) (ADANETCO) is a computed record. This record is comprised of data obtained from Alva B. Adam's Tunnel Near Estes Park, CO (ADATUNCO), Wind River Near Estes Park, CO (WINDESCO) and Wind River Bypass Below Adam's Tunnel Near Estes Park, CO (WINBYPCO). See individual records for WINDESCO and WINBYPCO for station equipment. ADATUNCO equipment includes graphic water-stage recorder and Satellite Monitoring Data Collection Platform (DCP) in a rectangular concrete shelter and concrete Ha / Hb wells at a 15-foot Parshall Flume. Gage is equipped with electric tape gages on both wells. A supplementary staff gage is located on the left wing wall of the flume. The Stevens A-35 was removed and replaced by a Sutron Stage Discharge Recorder (SDR) on April 2, 2007. The gage is operated in cooperation with the United States Bureau of Reclamation (USBR) and the Colorado Division of Water Resources (DWR)

REMARKS.--The primary record is hourly averages of 15-minute satellite data with chart and SDR as backup. The record is complete and reliable. In the winter months heat lamps and heaters are used to keep the well from freezing. Zero flow is determined operationally. Small residual flows draining through the flume after the tunnel is turned off were considered to be zero. Zero flow occurred on part of the day or all day on the following days: October 17-29; October 31-December 9, 2006. Zero flow was observed on October 24, November 2, November 27 and December 4, 2006. Record is good.

Beginning in the 2000 water year, ADANETCO (West slope delivery only) has been published to provide the west slope delivery on a daily basis. ADANETCO discharge is determined by calculating the amount of skimmed Wind River water moved through the ADATUNCO structure and subtracting that amount from the ADATUNCO record on days when skimming occurred. Thus ADANETCO = ADATUNCO - (WINDESCO - WINDESCO, Skimming operations occurred between May 3, 2007 and July 17, 2007. The ADATUNCO, WINDESCO, and WINDESCO records are considered good during this period. For non-skim periods, ADANETCO = ADATUNCO and is rated good. Station maintained by USBR personnel and record developed by Russell Stroud.

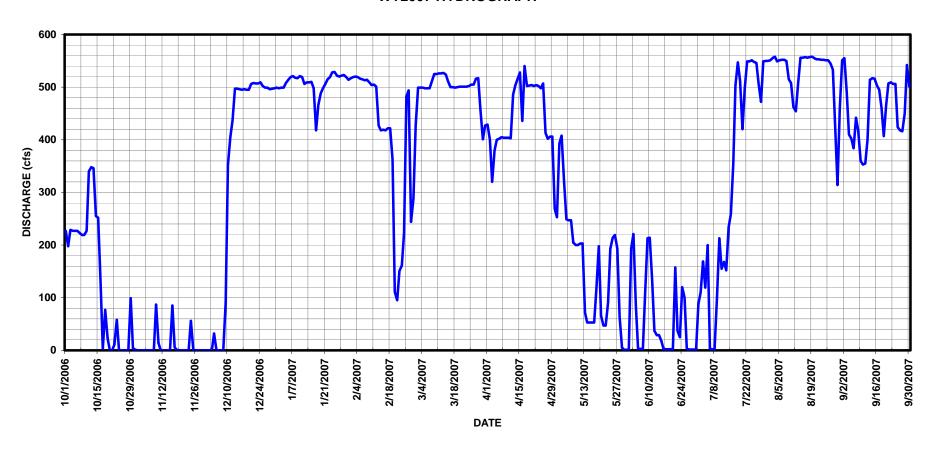
> DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	227	0	0	498	517	427	429	253	1.1	88	551	551
2	198	0	0	499	519	499	400	393	194	110	555	555
3	229	0	0	499	520	499	320	408	221	169	558	491
4	227	0	32	508	519	499	380	323	86	119	549	410
5	227	0	.09	514	516	498	400	249	2.6	200	551	402
6	227	0	0	519	515	498	402	247	2.7	3.1	552	384
7	223	0	0	521	513	498	405	247	2.7	1.9	552	442
8	219	0	0	518	514	512	404	205	108	1.7	550	417
9	219	87	91	517	509	525	404	200	213	99	515	360
10	227	14	352	521	504	525	404	200	214	213	508	353
11	340	0	405	519	505	526	403	203	133	155	462	355
12	348	0	437	506	501	526	486	203	37	168	454	400
13	346	0	497	509	427	527	503	72	29	152	506	514
14	255	0	497	509	418	524	516	53	29	234	556	517
15	252	0	496	510	419	511	528	53	18	259	556	516
16	130	85	495	498	418	500	436	53	2.1	354	557	503
17	3.0	5.9	496	418	422	500	540	53	2.1	503	556	495
18	77	0	495	466	422	499	502	117	2.1	547	557	461
19	23	0	495	488	362	500	503	198	2.0	512	558	407
20	0	0	506	498	111	501	504	66	2.0	420	555	466
21	0	0	508	506	95	501	502	47	157	497	553	507
22	11	0	507	515	151	501	504	47	37	549	553	509
23	58	0	507	519	161	501	502	91	25	549	552	506
24	0	56	509	528	224	502	498	193	120	551	552	506
25	0	1.3	502	529	482	505	507	214	100	548	551	424
26	0	0	499	522	494	505	413	219	2.8	546	551	418
27	0	0	499	520	244	516	402	193	1.4	506	545	416
28	0	0	496	522	288	517	406	64	1.6	472	533	450
29	99	0	497	523		456	406	5.1	1.5	549	427	542
30	4.0	0	498	519		401	269	1.0	1.6	550	314	501
31	1.3		499	514		427		1.2		550	458	
TOTAL	4170.3	249.2	10815.09	15752	11290	15426	13278	4871.3	1749.3	10175.7	16347	13778
MEAN	135	8.31	349	508	403	498	443	157	58.3	328	527	459
AC-FT	8270	494	21450	31240	22390	30600	26340	9660	3470	20180	32420	27330
MAX	348	87	509	529	520	527	540	408	221	551	558	555
MIN	0	0	0	418	95	401	269	1.0	1.1	1.7	314	353
CAL YR	2006	TOTAL 13	36882.6	MEAN	375 MAX	57	72 MIN	0	AC-FT	271500		
WTR YR	2007	TOTAL 13	17901.89	MEAN	323 MAX	55	58 MIN	0	AC-FT	233900		

MAX DISCH: 558 CFS AT 12:00 ON Aug. 3, 2007 GH 558 FT. SHIFT 0 FT.

MAX GH: 558 FT. AT 12:00 ON Aug. 3, 2007

# 09013000 ALVA B. ADAMS TUNNEL (NET) AT EAST PORTAL NEAR ESTES PARK CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### 09010000 GRAND RIVER DITCH AT LA POUDRE PASS, CO

LOCATION.--Lat 40°28'22", long 105°49'17", in NW4 sec. 21, T.6 N., R.75 W., in Platte River Basin, to La Poudre Pass Creek, tributary to Cache La Poudre River.

GAGE.--F-type water stage recorder with satellite telemetry in a wooden shelter at a 10-foot Parshall Flume. A drop tape is the primary reference gage.

REMARKS.--The primary record is hourly averages fo 15-minute satellite data with chart backup. The record is complete and reliable, except for May 3-4, 2007 due to ice and snow in the channel below the flume causing the flume to run in submergence. The record is good, except for the ice affected days of May 3-4, 2007, which are estimated and poor. Station maintained and record developed by Mark Simpson.

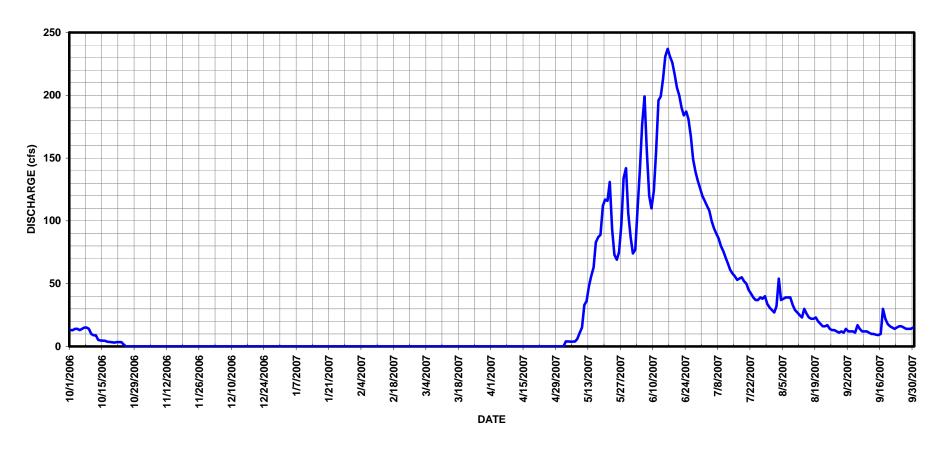
RATING TABLE. -- STD10FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

1       13       0       0       0       0       0       74       120       27       14         2       13       0       0       0       0       0       0       77       116       32       12         3       14       0       0       0       0       0       0       109       112       54       12         4       14       0       0       0       0       0       0       141       108       37       12         5       13       0       0       0       0       0       0       141       108       37       12         6       14       0       0       0       0       0       3.8       177       100       38       11         7       15       0       0       0       0       0       3.8       199       94       39       17         7       15       0       0       0       0       0       156       90       39       14         8       15       0       0       0       0       0       156       14       20       39       12
3       14       0       0       0       0       0       4.0       109       112       54       12         4       14       0       0       0       0       0       0       4.0       141       108       37       12         5       13       0       0       0       0       0       0       3.8       177       100       38       11         6       14       0       0       0       0       0       0       3.8       199       94       39       17         7       15       0       0       0       0       0       0       0       3.8       199       94       39       17         8       15       0       0       0       0       0       0       6.1       120       86       39       12         9       14       0       0       0       0       0       0       111       10       80       33       12         11       8.9       0       0       0       0       0       0       33       155       71       27       11         12       8.8
4       14       0       0       0       0       0       4.0       141       108       37       12         5       13       0       0       0       0       0       3.8       177       100       38       11         6       14       0       0       0       0       0       0       3.8       199       94       39       17         7       15       0       0       0       0       0       0       4.0       156       90       39       14         8       15       0       0       0       0       0       6.1       120       86       39       12         9       14       0       0       0       0       0       11       110       80       33       12         10       10       0       0       0       0       0       15       124       76       29       12         11       8.9       0       0       0       0       0       33       155       71       27       11         12       8.8       0       0       0       0       0       36
4       14       0       0       0       0       0       4.0       141       108       37       12         5       13       0       0       0       0       0       3.8       177       100       38       11         6       14       0       0       0       0       0       0       3.8       199       94       39       17         7       15       0       0       0       0       0       0       4.0       156       90       39       14         8       15       0       0       0       0       0       0       6.1       120       86       39       12         9       14       0       0       0       0       0       11       110       80       33       12         10       10       0       0       0       0       0       15       124       76       29       12         11       8.9       0       0       0       0       0       33       155       71       27       11         12       8.8       0       0       0       0       0
6
7       15       0       0       0       0       0       4.0       156       90       39       14         8       15       0       0       0       0       0       0       11       110       86       39       12         9       14       0       0       0       0       0       11       110       80       33       12         10       10       0       0       0       0       0       0       11       110       80       33       12         11       8.9       0       0       0       0       0       0       33       155       71       27       11         12       8.8       0       0       0       0       0       36       196       66       25       10         13       5.2       0       0       0       0       0       48       199       61       23       9.9         14       4.7       0       0       0       0       66       22       13       58       30       9.3         15       4.6       0       0       0       0       0
7       15       0       0       0       0       0       4.0       156       90       39       14         8       15       0       0       0       0       0       0       11       110       80       33       12         10       10       0       0       0       0       0       11       110       80       33       12         11       8.9       0       0       0       0       0       15       124       76       29       12         11       8.9       0       0       0       0       0       33       155       71       27       11         12       8.8       0       0       0       0       0       36       196       66       25       10         13       5.2       0       0       0       0       0       48       199       61       23       9.9         14       4.7       0       0       0       0       0       66       2213       58       30       9.3         15       4.6       0       0       0       0       0       63       231
9
10       10       0       0       0       0       0       15       124       76       29       12         11       8.9       0       0       0       0       0       0       33       155       71       27       11         12       8.8       0       0       0       0       0       36       196       66       25       10         13       5.2       0       0       0       0       0       48       199       61       23       9.9         14       4.7       0       0       0       0       0       56       213       58       30       9.3         15       4.6       0       0       0       0       0       63       231       56       26       9.1         16       4.4       0       0       0       0       0       83       237       53       23       10         17       3.7       0       0       0       0       0       87       231       54       22       30         18       3.6       0       0       0       0       0       89
11       8.9       0       0       0       0       0       0       33       155       71       27       11         12       8.8       0       0       0       0       0       36       196       66       25       10         13       5.2       0       0       0       0       0       48       199       61       23       9.9         14       4.7       0       0       0       0       0       56       213       58       30       9.3         15       4.6       0       0       0       0       0       63       231       56       26       9.1         16       4.4       0       0       0       0       0       0       83       237       53       23       10         18       3.6       0       0       0       0       0       0       89       226       55       22       22         19       3.3       0       0       0       0       0       0       112       217       52       23       18         20       3.1       0       0       0 <td< td=""></td<>
12       8.8       0       0       0       0       0       36       196       66       25       10         13       5.2       0       0       0       0       0       0       48       199       61       23       9.9         14       4.7       0       0       0       0       0       56       213       58       30       9.3         15       4.6       0       0       0       0       0       63       231       56       26       9.1         16       4.4       0       0       0       0       0       0       0       83       237       53       23       10         17       3.7       0       0       0       0       0       0       89       226       55       22       22         19       3.3       0       0       0       0       0       0       89       226       55       22       22         19       3.3       0       0       0       0       0       117       206       50       20       16         21       3.5       0       0 <td< td=""></td<>
13       5.2       0       0       0       0       0       48       199       61       23       9.9         14       4.7       0       0       0       0       0       0       56       213       58       30       9.3         15       4.6       0       0       0       0       0       0       63       231       56       26       9.1         16       4.4       0       0       0       0       0       0       83       237       53       23       10         17       3.7       0       0       0       0       0       0       87       231       54       22       30         18       3.6       0       0       0       0       0       0       89       226       55       22       22       22         19       3.3       0       0       0       0       0       0       112       217       52       23       18         20       3.1       0       0       0       0       0       117       206       50       20       16         21       3.5       <
14       4.7       0       0       0       0       0       56       213       58       30       9.3         15       4.6       0       0       0       0       0       0       63       231       56       26       9.1         16       4.4       0       0       0       0       0       0       83       237       53       23       10         17       3.7       0       0       0       0       0       87       231       54       22       30         18       3.6       0       0       0       0       0       89       226       55       22       22         19       3.3       0       0       0       0       0       112       217       52       23       18         20       3.1       0       0       0       0       0       117       206       50       20       16         21       3.5       0       0       0       0       0       116       200       45       18       15         22       3.5       0       0       0       0       0 <t< td=""></t<>
15       4.6       0       0       0       0       0       63       231       56       26       9.1         16       4.4       0       0       0       0       0       0       83       237       53       23       10         17       3.7       0       0       0       0       0       87       231       54       22       30         18       3.6       0       0       0       0       0       89       226       55       22       22         19       3.3       0       0       0       0       0       0       112       217       52       23       18         20       3.1       0       0       0       0       0       117       206       50       20       16         21       3.5       0       0       0       0       0       116       200       45       18       15         22       3.5       0       0       0       0       0       131       190       42       16       14         23       3.4       0       0       0       0       0 <t< td=""></t<>
16       4.4       0       0       0       0       0       83       237       53       23       10         17       3.7       0       0       0       0       0       87       231       54       22       30         18       3.6       0       0       0       0       0       89       226       55       22       22       22         19       3.3       0       0       0       0       0       112       217       52       23       18         20       3.1       0       0       0       0       0       0       117       206       50       20       16         21       3.5       0       0       0       0       0       116       200       45       18       15         22       3.5       0       0       0       0       0       131       190       42       16       14         23       3.4       0       0       0       0       0       93       184       39       16       15         24       1.5       0       0       0       0       0 <t< td=""></t<>
17       3.7       0       0       0       0       0       87       231       54       22       30         18       3.6       0       0       0       0       0       89       226       55       22       22         19       3.3       0       0       0       0       0       112       217       52       23       18         20       3.1       0       0       0       0       0       117       206       50       20       16         21       3.5       0       0       0       0       0       116       200       45       18       15         22       3.5       0       0       0       0       0       131       190       42       16       14         23       3.4       0       0       0       0       0       93       184       39       16       15         24       1.5       0       0       0       0       0       73       187       37       17       16         25       0       0       0       0       0       0       0       181 <td< td=""></td<>
18       3.6       0       0       0       0       0       89       226       55       22       22         19       3.3       0       0       0       0       0       112       217       52       23       18         20       3.1       0       0       0       0       0       117       206       50       20       16         21       3.5       0       0       0       0       0       116       200       45       18       15         22       3.5       0       0       0       0       0       0       42       16       14         23       3.4       0       0       0       0       0       93       184       39       16       15         24       1.5       0       0       0       0       0       73       187       37       17       16         25       0       0       0       0       0       0       0       131       190       42       16       14         25       0       0       0       0       0       0       73       187       37<
19       3.3       0       0       0       0       0       0       112       217       52       23       18         20       3.1       0       0       0       0       0       117       206       50       20       16         21       3.5       0       0       0       0       0       116       200       45       18       15         22       3.5       0       0       0       0       0       0       42       16       14         23       3.4       0       0       0       0       0       0       93       184       39       16       15         24       1.5       0       0       0       0       0       0       73       187       37       17       16         25       0       0       0       0       0       0       0       73       187       37       17       16         26       0       0       0       0       0       0       75       167       39       13       15         27       0       0       0       0       0       0
20       3.1       0       0       0       0       0       117       206       50       20       16         21       3.5       0       0       0       0       0       116       200       45       18       15         22       3.5       0       0       0       0       0       131       190       42       16       14         23       3.4       0       0       0       0       0       93       184       39       16       15         24       1.5       0       0       0       0       0       73       187       37       17       16         25       0       0       0       0       0       0       0       181       37       14       16         26       0       0       0       0       0       0       0       75       167       39       13       15         27       0       0       0       0       0       0       98       149       38       13       14         28       0       0       0       0       0       0       134       139
21       3.5       0       0       0       0       0       116       200       45       18       15         22       3.5       0       0       0       0       0       131       190       42       16       14         23       3.4       0       0       0       0       0       93       184       39       16       15         24       1.5       0       0       0       0       0       73       187       37       17       16         25       0       0       0       0       0       0       69       181       37       14       16         26       0       0       0       0       0       0       75       167       39       13       15         27       0       0       0       0       0       0       98       149       38       13       14         28       0       0       0       0       0       0       134       139       40       12       14         29       0       0       0       0       0       142       132       34       11
22       3.5       0       0       0       0       0       131       190       42       16       14         23       3.4       0       0       0       0       0       93       184       39       16       15         24       1.5       0       0       0       0       0       73       187       37       17       16         25       0       0       0       0       0       0       69       181       37       14       16         26       0       0       0       0       0       0       75       167       39       13       15         27       0       0       0       0       0       0       98       149       38       13       14         28       0       0       0       0       0       0       134       139       40       12       14         29       0       0       0       0       0       142       132       34       11       14         30       0       0       0       0       0       166       126       31       12       15
23       3.4       0       0       0       0       0       93       184       39       16       15         24       1.5       0       0       0       0       0       73       187       37       17       16         25       0       0       0       0       0       69       181       37       14       16         26       0       0       0       0       0       0       75       167       39       13       15         27       0       0       0       0       0       98       149       38       13       14         28       0       0       0       0       0       0       98       149       38       13       14         29       0       0       0       0       0       0       134       139       40       12       14         29       0       0       0       0       0       142       132       34       11       14         30       0       0       0       0       0       106       126       31       12       15         31
24       1.5       0       0       0       0       0       73       187       37       17       16         25       0       0       0       0       0       0       69       181       37       14       16         26       0       0       0       0       0       0       75       167       39       13       15         27       0       0       0       0       0       0       98       149       38       13       14         28       0       0       0       0       0       0       134       139       40       12       14         29       0       0       0       0       0       142       132       34       11       14         30       0       0       0       0        0       106       126       31       12       15         31       0        0       0        87        29       11
25       0       0       0       0       0       69       181       37       14       16         26       0       0       0       0       0       0       75       167       39       13       15         27       0       0       0       0       0       98       149       38       13       14         28       0       0       0       0       0       134       139       40       12       14         29       0       0       0       0        0       0       142       132       34       11       14         30       0       0       0        0       0       106       126       31       12       15         31       0        0       0        87        29       11
26       0       0       0       0       0       0       75       167       39       13       15         27       0       0       0       0       0       0       98       149       38       13       14         28       0       0       0       0       0       134       139       40       12       14         29       0       0       0       0        0       0       142       132       34       11       14         30       0       0       0        0       0       106       126       31       12       15         31       0        0       0        87        29       11
27     0     0     0     0     0     98     149     38     13     14       28     0     0     0     0     0     134     139     40     12     14       29     0     0     0     0     0     142     132     34     11     14       30     0     0     0     0     0     106     126     31     12     15       31     0<
28
29     0     0     0     0      0     0     142     132     34     11     14       30     0     0     0     0      0     0     106     126     31     12     15       31     0      0     0      87      29     11
30 0 0 0 0 0 0 0 106 126 31 12 15 31 0 0 0 0 87 29 11
31 0 0 0 0 87 29 11
TOTAL 197.2 0 0 0 0 0 0 1899.7 5053 1969 761 421.3
MEAN 6.36 0 0 0 0 0 0 61.3 168 63.5 24.5 14.0
AC-FT 391 0 0 0 0 0 0 3770 10020 3910 1510 836
MAX 15 0 0 0 0 0 0 142 237 120 54 30
MIN 0 0 0 0 0 0 0 0 0 74 29 11 9.1
CAL YR 2006 TOTAL 9956 MEAN 27.2 MAX 255 MIN 0 AC-FT 19753
WTR YR 2007 TOTAL 10301 MEAN 28.2 MAX 237 MIN 0 AC-FT 20430

MAX DISCH: 276 CFS AT 18:30 ON Jun. 17, 2007 GH 3.38 FT. SHIFT 0 FT. MAX GH: 3.38 FT. AT 18:30 ON Jun. 17, 2007

### 09010000 GRAND RIVER DITCH AT LA POUDRE PASS CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### 06745500 CAMERON PASS DITCH AT CAMERON PASS, CO

GAGE.-Sutron stage discharge recorder (SDR) in a wooden shelter and stilling well at a 2 foot Parshall Flume
Primary reference gage is an outside staff gage in the flume.

REMARKS.--Primary record is hourly averages of 5-minute SDR data values. The record is complete and reliable. Record is good. Water was run from May 22 until July 10, 2007. Station maintained by Mark Simpson and record developed by Lee Cunning.

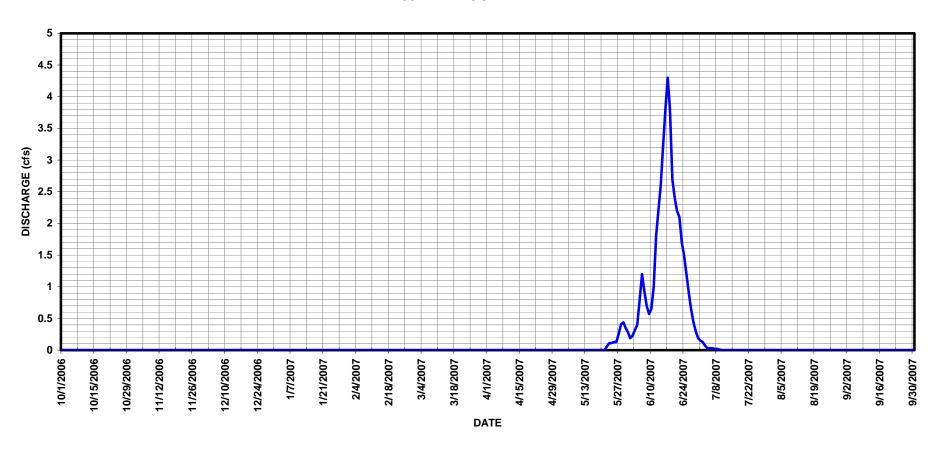
RATING TABLE. -- STD02FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

## DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	.19	.15	0	0
2	0	0	0	0	0	0	0	0	.23	.13	0	0
3	0	0	0	0	0	0	0	0	.32	.07	0	0
4	0	0	0	0	0	0	0	0	.40	.03	0	0
5	0	0	0	0	0	0	0	0	.79	.03	0	0
6	0	0	0	0	0	0	0	0	1.2	.03	0	0
7	0	0	0	0	0	0	0	0	.94	.02	0	0
8	0	0	0	0	0	0	0	0	.70	.02	0	0
9	0	0	0	0	0	0	0	0	.57	.01	0	0
10	0	0	0	0	0	0	0	0	.65	0	0	0
11	0	0	0	0	0	0	0	0	1.0	0	0	0
12	0	0	0	0	0	0	0	0	1.8	0	0	0
13	0	0	0	0	0	0	0	0	2.2	0	0	0
14	0	0	0	0	0	0	0	0	2.6	0	0	0
15	0	0	0	0	0	0	0	0	3.2	0	0	0
16	0	0	0	0	0	0	0	0	3.8	0	0	0
17	0	0	0	0	0	0	0	0	4.3	0	0	0
18	0	0	0	0	0	0	0	0	3.8	0	0	0
19	0	0	0	0	0	0	0	0	2.7	0	0	0
20	0	0	0	0	0	0	0	0	2.4	0	0	0
21	0	0	0	0	0	0	0	0	2.2	0	0	0
22	0	0	0	0	0	0	0	.06	2.1	0	0	0
23	0	0	0	0	0	0	0	.11	1.7	0	0	0
24	0	0	0	0	0	0	0	.11	1.5	0	0	0
25	0	0	0	0	0	0	0	.13	1.2	0	0	0
26	0	0	0	0	0	0	0	.13	.90	0	0	0
27	0	0	0	0	0	0	0	.25	.65	0	0	0
28	0	0	0	0	0	0	0	.41	. 44	0	0	0
29	0	0	0	0		0	0	.44	.29	0	0	0
30	0	0	0	0		0	0	.35	.19	0	0	0
31	0		0	0		0		.28		0	0	
TOTAL	0	0	0	0	0	0	0	2.27	44.96	.49	0	0
MEAN	0	0	0	0	0	0	0	.073	1.50	.016	0	0
AC-FT	0	0	0	0	0	0	0	4.5	89	1.0	0	0
MAX	0	0	0	0	0	0	0	. 44	4.3	.15	0	0
MIN	0	0	0	0	0	0	0	0	.19	0	0	0
CAL YR	2006	TOTAL	81.60 MEAN		.22 MAX	6.0	MIN	0	AC-FT	162		
WTR YR	2007	TOTAL	47.72 MEAN		.13 MAX	4.3	MIN	0	AC-FT	95		

MAX DISCH: 5.23 CFS AT 16:15 ON Jun. 17, 2007 GH 0.76 FT. SHIFT 0 FT. MAX GH: 0.76 FT. AT 16:15 ON Jun. 17, 2007

### 06745500 CAMERON PASS DITCH AT CAMERON PASS CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### 06746000 MICHIGAN DITCH AT CAMERON PASS, CO

LOCATION.--Lat 40°31'14", long 105°53'30"; Diverts water from Michigan River and tributaries, to Joe Wright Creek (tributary to Cache la Poudre River) in sec. 2, T.6 N., R. 76 W.

GAGE.--Weekly graphic water-stage recorder and satellite monitoring equipment in a log shelter with a PVC well at co-located 9-inch and 8 foot Parshall flumes. An inside electric tape to the stilling well is the primary reference gage. The 9-inch Parshall sits side by side with the 8-foot flume, allowing winter and low flows (flows below about 4.5 cfs) to be measured. Two tables are used and the crest height for both flumes is tied to the electric tape, as both flumes share a common stilling well. The shelter is heated by propane so that the flume and well are free of ice. City of Fort Collins personnel put sections of halved 2-ft culverts in the ditch below the flume to stop the back water conditions experienced in the past.

REMARKS.--Primary record is hourly averages of 15-minute satellite data with chart backup. Periods of use for each flume were: October 1, 2006 - May 8, 2007, 9-inch Parshall; May 8 - Sept 17, 2007, 8-foot Parshall; Sept. 17-30, 2007, 9-inch Parshall. The record is complete and reliable. Missing satellite data on several days (Oct 31-Nov 3, Nov 9-10, Jan 14-15, Feb 24, Apr 11-12, 14, 17-18, May 8, 10) were replaced with chart data with no loss of accuracy. The record is considered good. The halved culverts below the flume stopped the back water issues completely. Station maintained and record developed by Mark Simpson.

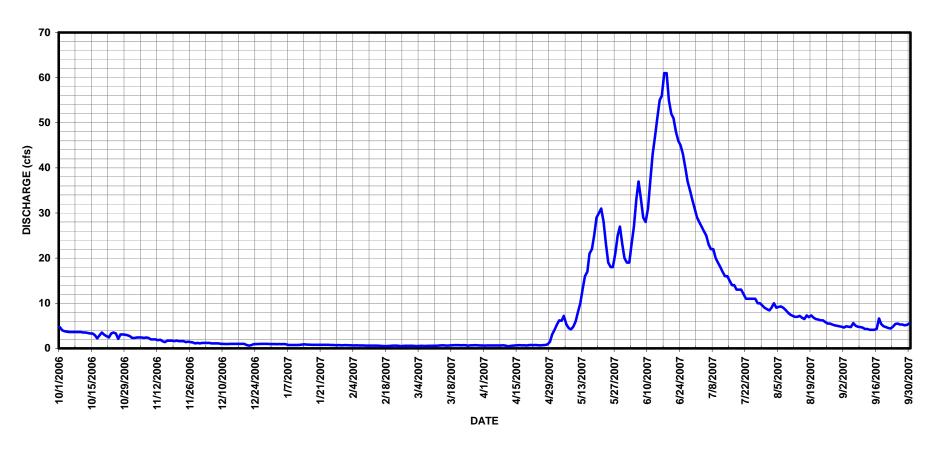
## DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	2.3	1.2	.96	.71	.56	.62	4.1	19	29	8.4	4.8
2	4.0	2.3	1.2	.93	.68	.53	.65	5.3	19	28	9.0	4.6
3	3.8	2.4	1.2	.94	.67	.51	.64	6.2	23	27	10	4.9
4	3.7	2.4	1.2	.91	.64	.52	.64	6.1	27	26	9.0	4.8
5	3.6	2.4	1.1	.94	.66	.55	.64	7.2	33	25	9.2	4.7
6	3.6	2.3	1.1	.88	.65	.54	.65	5.4	37	23	9.3	5.6
7	3.6	2.4	1.1	.74	.65	.54	.65	4.5	33	22	9.0	5.0
8	3.6	2.3	1.1	.74	.64	.56	.65	4.2	29	22	8.5	4.8
9	3.6	2.0	1.0	.75	.62	.56	.67	4.8	28	20	7.9	4.7
10	3.6	2.0	1.0	.74	.62	.55	.59	6.0	31	19	7.5	4.6
11	3.5	2.0	.96	.74	.62	.57	.47	8.0	37	18	7.2	4.3
12	3.5	1.8	.97	.78	.62	.59	.54	10	43	17	7.0	4.3
13	3.4	1.9	.99	.85	.60	.65	.61	13	47	16	7.0	4.1
14	3.3	1.6	1.0	.87	.60	.66	.63	16	51	16	7.2	4.1
15	3.3	1.4	1.0	.81	.58	.65	.68	17	55	15	6.8	4.1
16	2.9	1.7	.99	.80	.52	.62	.70	21	56	14	6.5	4.3
17	2.2	1.7	.99	.78	.48	.65	.68	22	61	14	7.3	6.6
18	2.9	1.7	.99	.79	.48	.69	.68	25	61	13	6.9	5.4
19	3.5	1.6	.99	.78	.53	.72	.63	29	55	13	7.3	4.9
20	3.0	1.7	.73	.79	.57	.72	.72	30	52	13	6.8	4.7
21	2.7	1.6	.62	.78	.59	.71	.74	31	51	12	6.5	4.5
22	2.4	1.6	.72	.78	.59	.68	.72	28	48	11	6.4	4.4
23	3.3	1.6	.92	.78	.58	.71	.73	23	46	11	6.2	4.8
24	3.5	1.4	.97	.77	.51	.68	.66	19	45	11	6.2	5.4
25	3.3	1.5	.97	.75	.52	.62	.67	18	43	11	5.8	5.5
26	2.1	1.4	. 98	.74	.56	.66	.70	18	40	11	5.5	5.3
27	3.1	1.3	1.0	.72	.56	.67	.73	21	37	10	5.5	5.3
28	3.1	1.1	1.0	.70	.56	.70	.89	25	35	10	5.3	5.1
29	3.0	1.2	1.0	.70		.66	1.5	27	33	9.5	5.1	5.2
30	2.9	1.1	.97	.69		.65	3.1	23	31	9.0	5.0	5.5
31	2.7		.95	.71		.64		20		8.7	4.9	
TOTAL	101.4	53.7	30.91	24.64	16.61	19.32	23.18	497.8	1206	504.2	220.2	146.3
MEAN	3.27	1.79	1.00	.79	.59	.62	.77	16.1	40.2	16.3	7.10	4.88
AC-FT	201	107	61	49	33	38	46	987	2390	1000	437	290
MAX	4.7	2.4	1.2	.96	.71	.72	3.1	31	61	29	10	6.6
MIN	2.1	1.1	.62	.69	.48	.51	.47	4.1	19	8.7	4.9	4.1

CAL YR 2006 TOTAL 1331.01 MEAN 3.65 MAX 60 MIN 0 AC-FT 2640 WTR YR 2007 TOTAL 2844.26 MEAN 7.79 MAX 61 MIN .47 AC-FT 5640

MAX DISCH: 72.3 CFS AT 17:45 ON June 17, 2007 GH 1.66 FT. SHIFT 0 FT. (8' Parshall Flume) MAX GH: 1.66 FT. AT 17:45 ON June 17, 2007 (8' Parshall Flume)

### 06746000 MICHIGAN DITCH AT CAMERON PASS CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### 06746500 SKYLINE DITCH NEAR CHAMBERS LAKE, CO

LOCATION.--Lat 40°39'50", long 105°53'10"; Diverts water from West Branch Laramie River, to Chambers Lake (tributary to Cache la Poudre River) in sec. 31, T.8 N., R.75 W.

**GAGE.**—-F-type graphic water-stage recorder in a wood shelter at a 10-ft. Parshall Flume. A drop tape inside the well is the primary reference.

REMARKS.--The primary record is mean daily gage heights taken from the chart recorder. This is the only source.

The charts are worked by the District 3 water commissioner and checked by hydrographer. No water was run during WY2007. Station maintained and record developed by Lee Cunning.

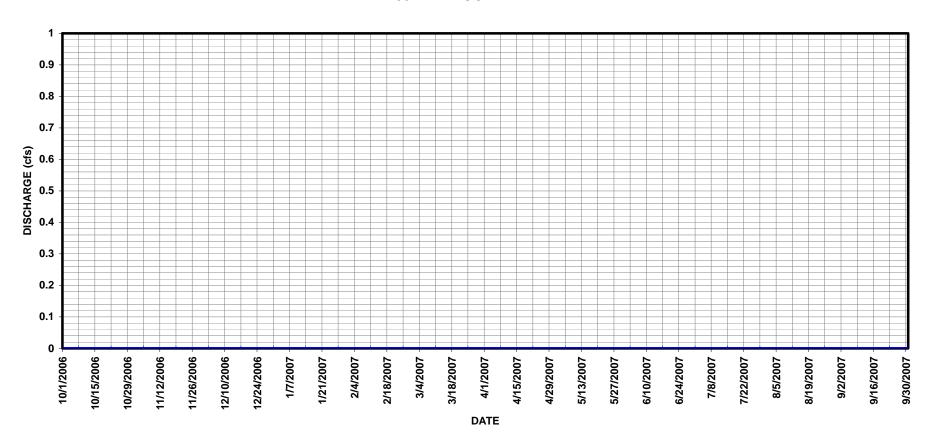
RATING TABLE.--STD10FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0		0	0	0	0	0	0	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0		0	0		0		0		0	0	
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	0	0	0
MAX	0	0	0	0	0	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR	2006	TOTAL	157.8 MEAN		.43 MAX	14			AC-FT	313		
WTR YR	2007	TOTAL	0 MEAN		0 MAX	0	MIN	U	AC-FT	0		

MAX DISCH: 0 CFS AT 00:00 ON Oct. 01, 2006 GH 0 FT. SHIFT 0 FT. MAX GH: 0 FT. AT 00:00 ON Oct. 01, 2007

### 06746500 SKYLINE DITCH NEAR CHAMBERS LAKE CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### 06747000 LARAMIE-POUDRE TUNNEL NEAR CHAMBERS LAKE, CO

LOCATION.--Lat 40°40'34", long 105°50'49"; Laramie-Poudre tunnel diverts water from Laramie River and tributaries to Cache la Poudre River in sec 9, T.8 N., R.75 W.

GAGE.--F-type graphic water stage recorder with satellite telemetry at a 10-foot Parshall Flume. The gage is referenced with a drop tape from an inside reference point. Supplemental outside staff gage.

REMARKS.--Primary record is hourly averages of 15-minute satellite data with chart backup. The record is complete and reliable. The tunnel was started on May 3<sup>rd</sup> and water was diverted until July 28<sup>th</sup> when it was turned off. Record is good. Station maintained and record developed by Lee Cunning.

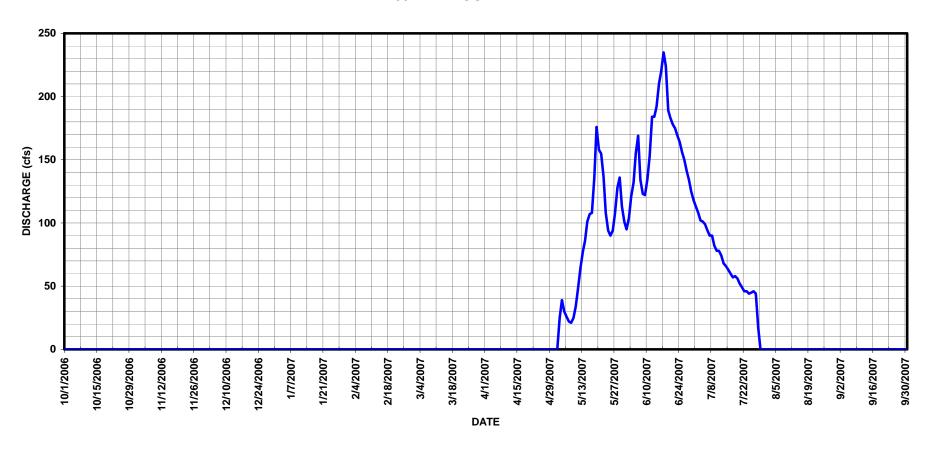
RATING TABLE.--STD10FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	95	113	0	0
2	0	0	0	0	0	0	0	0	104	108	0	0
3	0	0	0	0	0	0	0	25	121	102	0	0
4	0	0	0	0	0	0	0	39	132	101	0	0
5	0	0	0	0	0	0	0	30	155	99	0	0
6	0	0	0	0	0	0	0	26	169	94	0	0
7	0	0	0	0	0	0	0	22	134	90	0	0
8	0	0	0	0	0	0	0	21	123	90	0	0
9	0	0	0	0	0	0	0	25	122	82	0	0
10	0	0	0	0	0	0	0	34	135	78	0	0
11	0	0	0	0	0	0	0	49	153	78	0	0
12	0	0	0	0	0	0	0	64	184	74	0	0
13	0	0	0	0	0	0	0	77	184	68	0	0
14	0	0	0	0	0	0	0	86	192	66	0	0
15	0	0	0	0	0	0	0	101	210	63	0	0
16	0	0	0	0	0	0	0	107	220	60	0	0
17	0	0	0	0	0	0	0	108	235	57	0	0
18	0	0	0	0	0	0	0	136	224	58	0	0
19	0	0	0	0	0	0	0	176	189	56	0	0
20	0	0	0	0	0	0	0	158	183	52	0	0
21	0	0	0	0	0	0	0	155	178	49	0	0
22	0	0	0	0	0	0	0	137	175	46	0	0
23	0	0	0	0	0	0	0	108	169	46	0	0
24	0	0	0	0	0	0	0	94	164	44	0	0
25	0	0	0	0	0	0	0	90	156	45	0	0
26	0	0	0	0	0	0	0	94	150	46	0	0
27	0	0	0	0	0	0	0	108	141	44	0	0
28	0	0	0	0	0	0	0	128	134	17	0	0
29	0	0	0	0		0	0	136	125	0	0	0
30	0	0	0	0		0	0	113	118	0	0	0
31	0		0	0		0		101		0	0	
TOTAL	0	0	0	0	0	0	0	2548	4774	1926	0	0
MEAN	0	0	0	0	0	0	0	82.2	159	62.1	0	0
AC-FT	0	0	0	0	0	0	0	5050	9470	3820	0	0
MAX	0	0	0	0	0	0	0	176	235	113	0	0
MIN	0	0	0	0	0	0	0	0	95	0	0	0
CAL YR	2006	TOTAL	9444.72	MEAN	25.87 MA		270 MIN	C		18730		
WTR YR	2007	TOTAL	9248	MEAN	25.3 MA	ΑX	235 MIN	C	AC-FT	18340		

MAX DISCH: 270 CFS AT 19:00 ON Jun. 17, 2007 GH 3.33 FT. SHIFT 0 FT. MAX GH: 3.33 FT. AT 19:00 ON Jun. 17, 2007

# 06747000 LARAMIE-POUDRE TUNNEL NEAR CHAMBERS LAKE CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### BOB CREEK DITCH NEAR GLENDEVEY, CO

LOCATION.--Lat 40°31'50", long 105°45'40" NESWNW, sec. 11, 9 N., 75 W.

GAGE.--Stevens F-type graphic water-stage recorder in a metal shelter with stilling well at a 3-foot Parshall Flume owned by the City of Greeley. There is a staff in the flume and a drop tape for the well, with the drop tape being the primary reference. A Stage Discharge Recorder (SDR) was installed this Water Year as the primary recording device.

REMARKS.--Primary record was taken from 5-minute SDR data with chart gage heights as back up. Access to this gage is very difficult. The gage was dug out and the recorder was installed on May 8, 2007, but water did not flow in the ditch until May 10, 2007. Water diverted from May 10, 2007 at 02:00 PM until June 27, 2007 at 10:00 AM. SDR data were inaccurate on May 10-11, 2007. Chart data were corrected for scale problems and used without loss of accuracy. The record is good. Record developed by Lee Cunning.

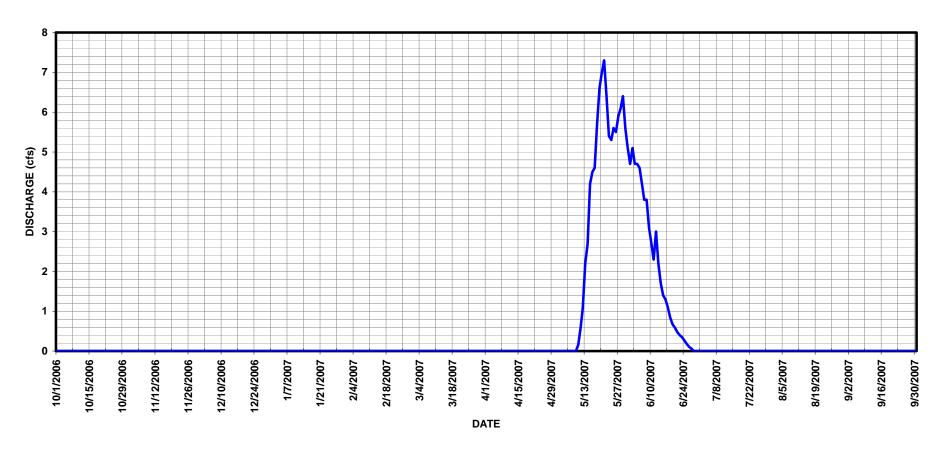
RATING TABLE.--STD03FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	4.7	0	0	0
2	0	0	0	0	0	0	0	0	5.1	0	0	0
3	0	0	0	0	0	0	0	0	4.7	0	0	0
4	0	0	0	0	0	0	0	0	4.7	0	0	0
5	0	0	0	0	0	0	0	0	4.6	0	0	0
6	0	0	0	0	0	0	0	0	4.2	0	0	0
7	0	0	0	0	0	0	0	0	3.8	0	0	0
8	0	0	0	0	0	0	0	0	3.8	0	0	0
9	0	0	0	0	0	0	0	0	3.1	0	0	0
10	0	0	0	0	0	0	0	.16	2.7	0	0	0
11	0	0	0	0	0	0	0	.60	2.3	0	0	0
12	0	0	0	0	0	0	0	1.1	3.0	0	0	0
13	0	0	0	0	0	0	0	2.2	2.2	0	0	0
14	Ö	0	Ō	Ö	Ö	Ö	0	2.7	1.7	Ō	Ō	0
15	0	0	0	0	0	0	0	4.2	1.4	0	0	0
16	Ö	0	Ō	Ö	Ö	Ö	0	4.5	1.3	Ō	Ō	0
17	0	0	0	0	0	0	0	4.6	1.1	0	0	0
18	0	0	0	0	0	0	0	5.7	.84	0	0	0
19	Ö	0	Ō	Ö	Ö	Ö	0	6.6	.67	Ō	Ō	0
20	0	0	0	0	0	0	0	7.0	.59	0	0	0
21	0	0	0	0	0	0	0	7.3	.48	0	0	0
22	0	0	0	0	0	0	0	6.4	.40	0	0	0
23	0	0	0	0	0	0	0	5.4	.35	0	0	0
24	Ö	0	Ō	Ö	Ö	Ö	0	5.3	.27	Ō	Ō	0
25	0	0	0	0	0	0	0	5.6	.18	0	0	0
26	0	0	0	0	0	0	0	5.5	.11	0	0	0
27	0	0	0	0	0	0	0	5.9	.06	0	0	0
28	0	0	0	0	0	0	0	6.1	0	0	0	0
29	0	0	0	0		0	0	6.4	0	0	0	0
30	0	0	0	0		0	0	5.6	0	0	0	0
31	0		0	0		0		5.1		0	0	
TOTAL	0	0	0	0	0	0	0	103.96	58.35	0	0	0
MEAN	0	0	0	0	0	0	0	3.35	1.95	0	0	0
AC-FT	0	0	0	0	0	0	0	206	116	0	0	0
MAX	0	0	0	0	0	0	0	7.3	5.1	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR	2006	TOTAL	108.40 ME	AN	.30 MAX	9.8	MIN	0	AC-FT	215		
WTR YR	2007	TOTAL	162.31 ME	AN	.44 MAX	7.3	MIN	0	AC-FT	322		

MAX DISCH: 8.96 CFS AT 18:40 ON May. 20, 2007 GH 0.86 FT. SHIFT -0.03 FT. MAX GH: 0.86 FT. AT 18:40 ON May. 20, 2007

### BOB CREEK DITCH NEAR GLENDEVEY CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### DEADMAN DITCH NEAR DEADMAN PARK, CO

LOCATION.--Lat 40°50'04", long 105°48'05", sec. 9, T. 10 N., R. 75 W., Diverts water from Laramie River and tributaries, to Sheep Creek (tributary to Cache La Poudre River) via Sand Creek.

**REMARKS.--**The primary record is 5-minute data taken from the SDR with the chart as backup. The record is complete and reliable, except for the period (May  $1^{st}$  - May  $13^{th}$ ). These days the floats were frozen and the flume was 100% submerged. Record is good, except for May 1-13, 2007, which were ice affected and submerged and are considered poor, and May 14 and 15, 2007, which were fair due to corrections to the SDR after the ice period. Water was run from May 1 - July 10, 2007. Record developed by Lee Cunning.

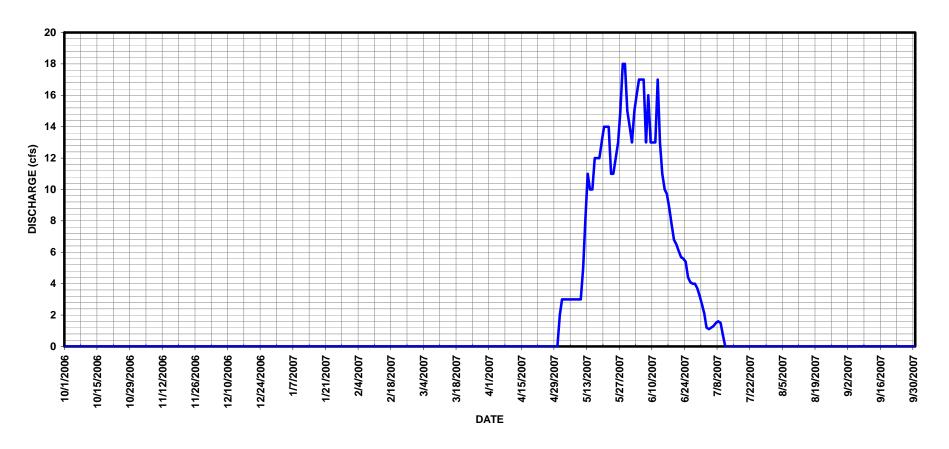
RATING TABLE.--STD06FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	2.0	13	2.7	0	0
2	0	0	0	0	0	0	0	3.0	15	2.1	0	0
3	0	0	0	0	0	0	0	3.0	16	1.2	0	0
4	0	0	0	0	0	0	0	3.0	17	1.1	0	0
5	0	0	0	0	0	0	0	3.0	17	1.2	0	0
6	0	0	0	0	0	0	0	3.0	17	1.3	0	0
7	0	0	0	0	0	0	0	3.0	13	1.5	0	0
8	0	0	0	0	0	0	0	3.0	16	1.6	0	0
9	0	0	0	0	0	0	0	3.0	13	1.5	0	0
10	0	0	0	0	0	0	0	3.0	13	.69	0	0
11	0	0	0	0	0	0	0	5.0	13	0	0	0
12	0	0	0	0	0	0	0	8.0	17	0	0	0
13	0	0	0	0	0	0	0	11	13	0	0	0
14	0	0	0	0	0	0	0	10	11	0	0	0
15	0	0	0	0	0	0	0	10	10	0	0	0
16	0	0	0	0	0	0	0	12	9.7	0	0	0
17	0	0	0	0	0	0	0	12	8.8	0	0	0
18	0	0	0	0	0	0	0	12	7.8	0	0	0
19	0	0	0	0	0	0	0	13	6.8	0	0	0
20	0	0	0	0	0	0	0	14	6.5	0	0	0
21	0	0	0	0	0	0	0	14	6.1	0	0	0
22	0	0	0	0	0	0	0	14	5.7	0	0	0
23	0	0	0	0	0	0	0	11	5.6	0	0	0
24	0	0	0	0	0	0	0	11	5.4	0	0	0
25	0	0	0	0	0	0	0	12	4.4	0	0	0
26	0	0	0	0	0	0	0	13	4.1	0	0	0
27	0	0	0	0	0	0	0	15	4.0	0	0	0
28	0	0	0	0	0	0	0	18	4.0	0	0	0
29	0	0	0	0		0	0	18	3.7	0	0	0
30	0	0	0	0		0	0	15	3.2	0	0	0
31	0		0	0		0		14		0	0	
TOTAL	0	0	0	0	0	0	0	291.0	299.8	14.89	0	0
MEAN	0	0	0	0	0	0	0	9.39	9.99	.48	0	0
AC-FT	0	0	0	0	0	0	0	577	595	30	0	0
MAX	0	0	0	0	0	Ö	0	18	17	2.7	Ö	0
MIN	0	0	0	0	0	0	0	2.0	3.2	0	0	0
	•	· ·	ŭ	•	Ŭ	Ü	•	2.0	0.2	Ü	ŭ	9
CAL YR	2006	TOTAL	306.41 MEAN		0.84 MAX	18	MIN	0	AC-FT	608		
WTR YR	2007	TOTAL	605.69 MEAN		1.66 MAX	18	MIN	0	AC-FT	1200		

MAX DISCH: 25.5 CFS AT 19:05 ON May. 28, 2007 GH 1.04 FT. SHIFT 0 FT. MAX GH: 1.04 FT. AT 19:05 ON May. 28, 2007

### DEADMAN DITCH NEAR DEADMAN PARK CO WY2007 HYDROGRAPH



#### PLATTE RIVER BASIN

#### 06750500 WILSON SUPPLY DITCH NEAR EATON RESERVOIR, CO

LOCATION.--Lat 40°54'31", long 105°46'43"; Diverts water from Sand Creek and Deadman Creek in Laramie River basin to Sheep Creek (tributary to North Fork Cache la Poudre River) in sec. 23, T.11 N., R.75 W., in the Cache la Poudre River basin.

**GAGE.**— Satellite telemetry and an F-type graphic water-stage recorder at a 10-foot Parshall Flume with a staff gage. Gage is referenced with an inside drop tape.

REMARKS.--Primary record is hourly averages of 15-minute satellite data with the chart as a backup. The record is complete and reliable. Record is good. Water was run from May 3 - July 7, 2007, when the ditch was shut off. Record developed by Lee Cunning.

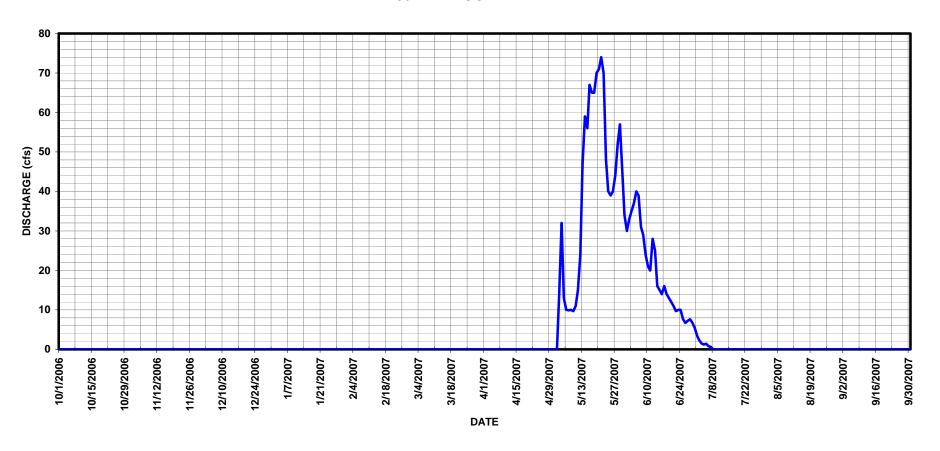
RATING TABLE.--STD10FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

## DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	30	3.5	0	0
2	0	0	0	0	0	0	0	0	33	2.3	0	0
3	0	0	0	0	0	0	0	14	35	1.5	0	0
4	0	0	0	0	0	0	0	32	37	1.2	0	0
5	0	0	0	0	0	0	0	13	40	1.4	0	0
6	0	0	0	0	0	0	0	10	39	.78	0	0
7	0	0	0	0	0	0	0	9.9	31	.62	0	0
8	0	0	0	0	0	0	0	10	29	0	0	0
9	0	0	0	0	0	0	0	9.7	24	0	0	0
10	0	0	0	0	0	0	0	11	21	0	0	0
11	0	0	0	0	0	0	0	15	20	0	0	0
12	0	0	0	0	0	0	0	24	28	0	0	0
13	0	0	0	0	0	0	0	47	25	0	0	0
14	0	0	0	0	0	0	0	59	16	0	0	0
15	0	0	0	0	0	0	0	56	15	0	0	0
16	0	0	0	0	0	0	0	67	14	0	0	0
17	0	0	0	0	0	0	0	65	16	0	0	0
18	0	0	0	0	0	0	0	65	14	0	0	0
19	0	0	0	0	0	0	0	70	13	0	0	0
20	0	0	0	0	0	0	0	71	12	0	0	0
21	0	0	0	0	0	0	0	74	11	0	0	0
22	0	0	0	0	0	0	0	70	9.7	0	0	0
23	0	0	0	0	0	0	0	48	10	0	0	0
24	0	0	0	0	0	0	0	40	10	0	0	0
25	0	0	0	0	0	0	0	39	7.7	0	0	0
26	0	0	0	0	0	0	0	40	6.7	0	0	0
27	0	0	0	0	0	0	0	44	7.2	0	0	0
28	0	0	0	0	0	0	0	52	7.6	0	0	0
29	0	0	0	0		0	0	57	6.8	0	0	0
30	0	0	0	0		0	0	45	5.5	0	0	0
31	0		0	0		0		34		0	0	
TOTAL	0	0	0	0	0	0	0	1191.6	574.2	11.30	0	0
MEAN	0	0	0	0	0	0	0	38.4	19.1	.36	0	0
AC-FT	0	0	0	0	0	0	0	2360	1140	22	0	0
MAX	0	0	0	0	0	0	0	74	40	3.5	0	0
MIN	0	0	0	0	0	0	0	0	5.5	0	0	0
CAL YR	2006	TOTAL	672.87 MEA		1.84 MAX	34	l MIN		AC-FT	1330		
WTR YR	2007	TOTAL	1777.1 MEA	AN	4.87 MAX	74	MIN	0	AC-FT	3520		

MAX DISCH: 93.8 CFS AT 21:00 ON May. 21, 2007 GH 1.72 FT. SHIFT 0 FT. MAX GH: 1.72 FT. AT 21:00 ON May. 21, 2007

# 06750500 WILSON SUPPLY DITCH NEAR EATON RESERVOIR CO WY2007 HYDROGRAPH



#### REPUBLICAN RIVER BASIN

#### PIONEER DITCH AT HEADGATE NEAR LAIRD, CO

**LOCATION.**—Lat  $40^{\circ}05'05''$ , long  $102^{\circ}08'30''$ , SW4NE4 sec. 2, T.1 N., R.43 W., Yuma County, 4 mi east of Wray, Co., 1000 ft south of U.S. Highway 34.

DRAINAGE AREA. --N/A

GAGE.--Type-F weekly graphic chart recorder and a high data rate Satellite Monitoring DCP, in metal box enclosure and well section at a 5-foot Parshall Flume. The flume is installed in concrete canal section and is referenced with an outside staff. The canal is equipped with a timber suspended in the flow to slow down velocities into the flume.

REMARKS.--The primary record is hourly averages of 15-minute satellite data with chart back up. The record is complete and reliable. The canal was off from October 17, 2006 to April 21, 2007; June 14-18, August 7-10, 24-27, 2007. The record is good, except for peak discharge on July 28, 2007 which is considered estimated and fair. Station maintained by Div 1 Staff and record developed by Lee Cunning.

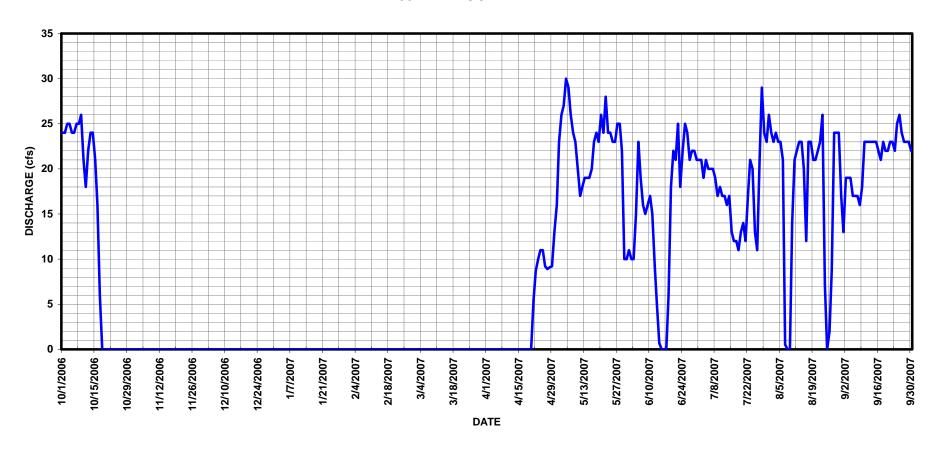
RATING TABLE.--STD05FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	0	0	0	0	0	0	16	11	21	24	13
2	24	0	0	0	0	0	0	23	10	21	23	19
3	25	0	0	0	0	0	0	26	10	19	24	19
4	25	0	0	0	0	0	0	27	15	21	23	19
5	24	0	0	0	0	0	0	30	23	20	23	17
6	24	0	0	0	0	0	0	29	19	20	21	17
7	25	0	0	0	0	0	0	26	16	20	.53	17
8	25	0	0	0	0	0	0	24	15	19	0	16
9	26	0	0	0	0	0	0	23	16	17	0	18
10	21	0	0	0	0	0	0	20	17	18	14	23
11	18	0	0	0	0	0	0	17	15	17	21	23
12	22	0	0	0	0	0	0	18	9.3	17	22	23
13	24	0	0	0	0	0	0	19	4.9	16	23	23
14	24	0	0	0	0	0	0	19	.69	17	23	23
15	21	0	0	0	0	0	0	19	0	13	20	23
16	16	0	0	0	0	0	0	20	0	12	12	22
17	6.0	0	0	0	0	0	0	23	0	12	23	21
18	0	0	0	0	0	0	0	24	6.0	11	23	23
19	0	0	0	0	0	0	0	23	18	13	21	22
20	0	0	0	0	0	0	0	26	22	14	21	22
21	0	0	0	0	0	0	5.4	24	21	12	22	23
22	0	0	0	0	0	0	8.7	28	25	17	23	23
23	0	0	0	0	0	0	10	24	18	21	26	22
24	0	0	0	0	0	0	11	24	22	20	7.2	25
25	0	0	0	0	0	0	11	23	25	13	0	26
26	0	0	0	0	0	0	9.2	23	24	11	2.0	24
27	0	0	0	0	0	0	8.9	25	21	21	8.8	23
28	0	0	0	0	0	0	9.1	25	22	29	24	23
29	0	0	0	0		0	9.2	22	22	24	24	23
30	0	0	0	0		0	13	10	21	23	24	22
31	0		0	0		0		10		26	17	
TOTAL	374.0	0	0	0	0	0	95.5	690	448.89	555	539.53	637
MEAN	12.1	0	0	0	0	0	3.18	22.3	15.0	17.9	17.4	21.2
AC-FT	742	0	0	0	0	0	189	1370	890	1100	1070	1260
MAX	26	0	0	0	0	0	13	30	25	29	26	26
MIN	0	0	0	0	0	0	0	10	0	11	0	13
CAL YR	2006		575.6 MEAN	9.		30	MIN		AC-FT	7090		
WTR YR	2007	TOTAL 3	339.9 MEAN	9.	15 MAX	30	MIN	0 <i>I</i>	AC-FT	6620		

MAX DISCH: 61 CFS AT 01:10 ON Jul. 28, 2007 (ESTIMATED) MAX GH: 2.09 FT. AT 01:10 ON Jul. 28, 2007 (ESTIMATED)

### PIONEER DITCH AT HEADGATE NEAR LAIRD CO WY2007 HYDROGRAPH



#### REPUBLICAN RIVER BASIN

#### PIONEER DITCH AT COLORADO-NEBRASKA STATE LINE

LOCATION.--Lat 40°03'25", long 102°03'10", SW4SW4 sec. 10, T.1 N., R.42 W., Yuma County; 1200 ft south of U.S. Highway 34 at Colorado/Nebraska State line.

#### DRAINAGE AREA. --N/A

GAGE.--Type-F graphic water-stage recorder and a Sutron High Data Rate DCP in metal box and well. The site is equipped with a 4-foot Parshall Flume with two outside vertical enameled steel staffs (Ha-Hb, with the Hb staff set with 4.0 ft = 0.0). The Ha staff is the primary reference. Station maintained by Pioneer Ditch Company.

REMARKS.--Record is hourly averages of 15-minute satellite data with the chart as backup. The record is complete. The ditch did not run October 18, 2006 through April 20, 2007; and was off June 14-18, August 7-10, 24-27, 2007. Gage height record less than 0.06 ft was considered zero due to the float being beached on the mud in the stilling well. Hourly data points less than 0.06 ft are averages of four 15 minute data points, some of which are zero. If it is noted the ditch was off on visit logs and some residual GH's were between 0.00 and 0.14, then flow was considered zero. Record is good. Record developed by Lee Cunning.

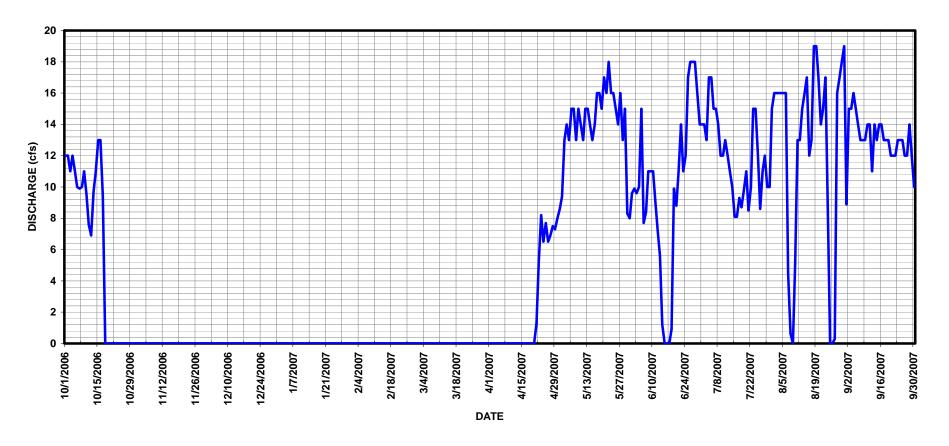
RATING TABLE.--STD04FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV		DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	0		0	0	0	0	0	8.6	9.6	14	16	8.9
2	12	0		0	0	0	0	0	9.4	9.9	14	16	15
3	11	0		0	0	0	0	0	13	9.6	13	16	15
4	12	0		0	0	0	0	0	14	10	17	16	16
5	11	0		0	0	0	0	0	13	15	17	16	15
6	10	0		0	0	0	0	0	15	7.7	15	16	14
7	9.9	0		0	0	0	0	0	15	8.4	15	4.5	13
8	10	0		0	0	0	0	0	13	11	14	.63	13
9	11	0		0	0	0	0	0	15	11	12	0	13
10	9.5	0		0	0	0	0	0	14	11	12	5.1	14
11	7.6	0		0	0	0	0	0	13	9.1	13	13	14
12	6.9	0		0	0	0	0	0	15	7.2	12	13	11
13	9.7	0		0	0	0	0	0	15	5.6	11	15	14
14	11	0		0	0	0	0	0	14	1.2	10	16	13
15	13	0		0	0	0	0	0	13	0	8.1	17	14
16	13	0		0	0	0	0	0	14	0	8.1	12	14
17	9.4	0		0	0	0	0	0	16	0	9.3	13	13
18	0	0		0	0	0	0	0	16	.92	8.7	19	13
19	0	0		0	0	0	0	0	15	9.9	9.8	19	13
20	0	0		0	0	0	0	0	17	8.8	11	17	12
21	0	0		0	0	0	0	1.3	16	11	8.5	14	12
22	0	0		0	0	0	0	5.2	18	14	10	15	12
23	0	0		0	0	0	0	8.2	16	11	15	17	13
24	0	0		0	0	0	0	6.5	16	12	15	8.3	13
25	0	0		0	0	0	0	7.7	15	17	12	0	13
26	0	0		0	0	0	0	6.5	14	18	8.6	0	12
27	0	0		0	0	0	0	6.9	16	18	11	.30	12
28	0	0		0	0	0	0	7.5	13	18	12	16	14
29	0	0		0	0		0	7.3	15	16	10	17	12
30	0	0		0	0		0	8.0	8.3	14	10	18	10
31	0			0	0		0		8.0		15	19	
TOTAL	179.0	0		0	0	0	0	65.1	433.3	294.92	371.1	384.83	390.9
MEAN	5.77	0		0	0	0	0	2.17	14.0	9.83	12.0	12.4	13.0
AC-FT	355	0		0	0	0	0	129	859	585	736	763	775
MAX	13	0		0	0	0	0	8.2	18	18	17	19	16
MIN	0	0		0	0	0	0	0	8.0	0	8.1	0	8.9
CAL YR	2006	TOTAL	2230	MEAN	6.10	MAX	21	MIN	0 AC	-FT	4420		
WTR YR	2007	TOTAL	2119	MEAN	5.81	MAX	19	MIN	0 AC		4200		

MAX DISCH: 26 CFS AT 01:15 ON Jul. 28, 2007 GH 1.28 FT. SHIFT 0.08 FT. MAX GH: 1.28 FT. AT 01:15 ON Jul. 28, 2007

# PIONEER DITCH AT COLORADO-NEBRASKA STATE LINE WY2007 HYDROGRAPH



#### ARKANSAS RIVER BASIN

#### 07082500 LAKE FORK CREEK BELOW SUGAR LOAF DAM NEAR LEADVILLE, CO

LOCATION.--Lat 39°15'05" long 106°22'28", Lake County, SE4NW4NW4 sec. 19, T.9 S., R.80 W., on right bank 4.2 miles upstream from junction of Lake Fork Creek and Arkansas River.

GAGE.--Graphic water-stage recorder, satellite-monitored data collection platform (Sutron high data rate SatLink Logger) and shaft encoder in 42-inch diameter corrugated metal pipe (CMP) shelter and concrete well. Shaft encoder and chart set to inside electric tape gage mounted on instrument shelf. Satellite data are primary record (graphic chart record is used for back-up purposes). Outside staff gage also used for reference purpose. Shelter is equipped with AC power for well heater. As of June 28, 2007, the A-35 chart recorder was replaced by an SDR. Control is a concrete weir with ogee lip, tapered lower from the left to right bank, located at the gage. Elevation of gage is 9,720 ft. from topographic map.

REMARKS.--Record is complete and reliable. Record good. Station maintained and record developed by L.R. Schultz.

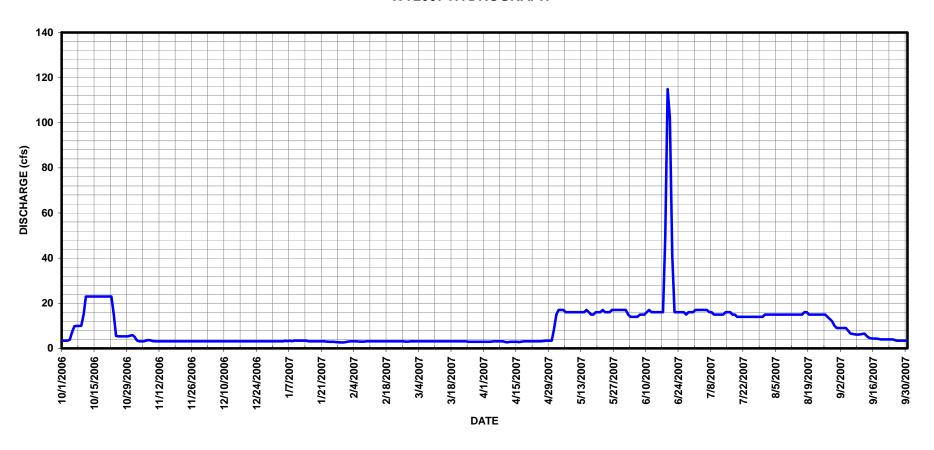
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE.--LFCBSLC004A USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCIII	inod, in c	ME.	AN VALUES		TO DELTE	INDDIC 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	5.1	3.1	3.1	3.0	3.1	2.9	8.4	17	17	15	9.0
2	3.4	3.5	3.1	3.1	3.1	3.1	2.9	15	15	17	15	9.0
3	3.4	3.1	3.1	3.1	3.1	3.1	2.9	17	14	17	15	9.0
4	3.8	3.1	3.1		3.1	3.1	3.0	17	14	17	15	9.0
5	7.0	3.1	3.1		3.1	3.1	3.1	17	14	17	15	7.7
6	9.8	3.5	3.1		3.0	3.1	3.1	16	14	17	15	6.5
7	9.9	3.7	3.1		3.0	3.1	3.1	16	15	16	15	6.4
8	9.9	3.5	3.1		3.0	3.1	3.1	16	15	16	15	6.2
9	10	3.2	3.1		3.1	3.1	3.1	16	15	15	15	6.1
10	15	3.1	3.1		3.1	3.1	2.8	16	16	15	15	6.2
11	23	3.1	3.1		3.1	3.1	2.7	16	17	15	15	6.4
12	23	3.1	3.1		3.1	3.1	2.9	16	16	15	15	6.5
13	23	3.1	3.1	3.4	3.1	3.1	2.9	16	16	15	15	5.4
14	23	3.1	3.1		3.1	3.1	2.9	16	16	16	15	4.6
15	23	3.1	3.1		3.1	3.1	2.9	17	16	16	15	4.4
16	23	3.1	3.1	3.1	3.1	3.1	2.8	16	16	16	15	4.3
17	23	3.1	3.1		3.1	3.1	3.0	15	16	15	16	4.3
18	23	3.1	3.1	3.1	3.1	3.1	3.1	15	49	15	16	4.2
19	23	3.1	3.1	3.1	3.1	3.1	3.1	16	115	14	15	4.0
20	23	3.1	3.1		3.1	3.1	3.1	16	102	14	15	4.0
21	23	3.1	3.1		3.1	3.1	3.1	16	41	14	15	4.0
22	23	3.1	3.1	3.1	3.1	3.1	3.1	17	16	14	15	4.0
23	_15	3.1	3.1		3.1	3.1	3.1	16	16	14	15	4.0
24	5.5	3.1	3.1	2.9	3.1	3.1	3.1	16	16	14	15	4.0
25	5.3	3.1	3.1	2.9	3.1	2.9	3.1	16	16	14	15	3.7
26	5.3	3.1	3.1		3.0	2.9	3.2	17	16	14	15	3.4
27	5.3	3.1	3.1	2.8	3.0	2.9	3.3	17	15	14	14	3.4
28	5.3	3.1	3.1	2.7	3.1	2.9	3.4	17 17	16	14	13	3.4
29	5.3	3.1	3.1			2.9	3.4		16	14	12	3.4
30 31	5.6	3.1	3.1	2.6		2.9 2.9	3.4	17 17	16 	14	10	3.4
31	5.9		3.1	2.8		2.9		1 /		15	9.0	
TOTAL	410.1	96.9	96.1	95.8	86.2	94.7	91.6	496.4	712	470	450.0	159.9
MEAN	13.2	3.23	3.10	3.09	3.08	3.05	3.05	16.0	23.7	15.2	14.5	5.33
AC-FT	813	192	191	190	171	188	182	985	1410	932	893	317
MAX	23	5.1	3.1	3.4	3.1	3.1	3.4	17	115	17	16	9.0
MIN	3.4	3.1	3.1	2.6	3.0	2.9	2.7	8.4	14	14	9.0	3.4
CAL YR	2006	TOTAL	5491.1	MEAN	15.0 MAX	410	O MIN	2.9	AC-FT	10890		
WTR YR	2007	TOTAL	3259.7	MEAN	8.93 MAX	115	5 MIN	2.6	AC-FT	6470		

MAX DISCH: 129 CFS AT 10:00 ON Jun. 19, 2007 GH 1.15 FT. SHIFT 0.11 FT. MAX GH: 1.15 FT. AT 10:00 ON Jun. 19, 2007

### 07082500 LAKE FORK CREEK BELOW SUGAR LOAF DAM NEAR LEADVILLE CO WY2007 HYDROGRAPH



#### ARKANSAS RIVER BASIN

#### 07084500 LAKE CREEK ABOVE TWIN LAKES RESERVOIR, CO

LOCATION.--Lat 39°03'47", long 106°24'28", Lake County, Hydrologic Unit 11020001, on left bank 1.35 mi upstream from water line of Twin Lakes Reservoir at elevation 9,200 ft and 2.1 mi southwest of village of Twin Lakes.

DRAINAGE AREA AND PERIOD OF RECORD.--75 mi<sup>2</sup>. April 1946 to Sept. 1962, Oct. 1963 to current year. Monthly data only for some periods.

GAGE. --Satellite-monitored data collection platform (Sat-Link 2) and Accububble in a 4 ft x 4-ft steel shelter on the left bank at a refurbished concrete section and bridge over Lake Creek. DCP data are the primary record. Primary reference gage is a drop wire weight mounted on the pedestrian bridge near the left side. A temperature sensor is operated at the site. The Accububbler line was moved from the middle of the creek to a pool at the left edge, where flow is more laminar, on Sept. 6, 2007. A new Accububbler unit was installed on Sept. 14, 2007, after large drops were noticed in measurements, especially in the morning during low temperatures.

REMARKS.--Record is complete and reliable except for the following periods: Nov. 16-21, 27-30; Dec. 1-7, 2006; Mar. 23; Apr. 12-14, 2007, when ice affected the stage discharge relationship; Dec. 8, 2006 to Mar. 21, 2007, when the station was closed for the winter. Record is good from Oct. 1, 2006, until Nov. 15, 2006. Record is poor from Nov. 16, 2006 to March 21, 2007, due to ice effect and due to closing gage for winter operation from Dec. 8, 2006, until Mar. 20, 2007. Record is fair from Mar. 22 to Sept. 14, 2007. Accububbler problems caused pressure drops at times, especially during Sept. 2007. These spurious data were filtered out resulting in numerous hourly estimates on affected days. Hourly estimates were made based on surrounding good data. Record is good from Sept. 15, 2007, through the end of the water year. Station maintained and record developed by L.R. Schultz.

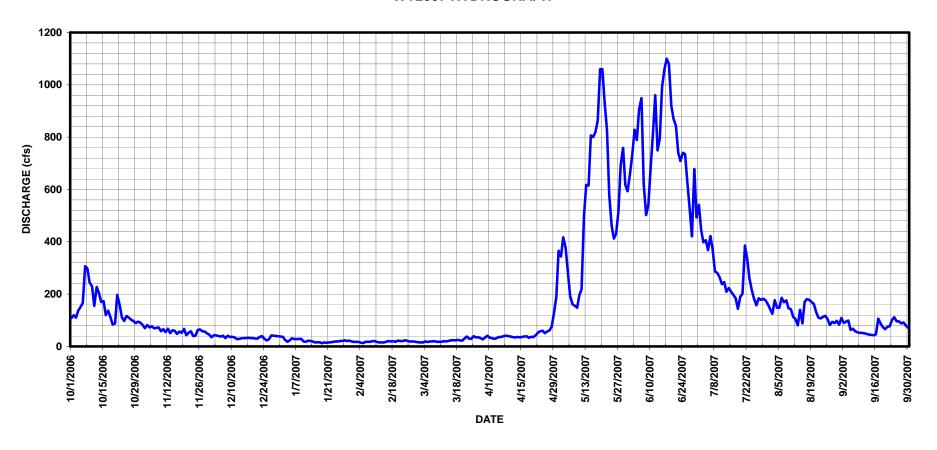
RATING TABLE.--LAKATLCO22 USED FROM 01-OCT-2006 TO 20-MAR-2007 LAKATLCO23 USED FROM 21-MAR-2007 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	82	35	37	17	16	33	366	659	541	142	109
2	119	70	43	25	18	15	32	344	730	445	125	90
3	110	82	42	18	17	15	29	417	828	398	177	95
4	136	73	40	23	14	19	32	377	789	406	148	99
5	151	77	38	31	13	17	36	283	906	368	148	63
6	166	69	41	28	18	19	36	193	949	422	186	68
7	307	71	32	28	18	19	39	161	620	370	169	58
8	298	73	41	29	18	20	41	156	502	287	176	54
9	244	58	36	29	20	18	40	148	541	281	146	52
10	230	66	37	19	20	18	38	196	680	265	142	52
11	155	55	35	18	17	18	36	218	816	238	113	50
12	227	68	28	22	15	20	34	497	960	246	105	48
13	205	51	29	21	15	19	36	617	749	209	81	45
14	170	62	31	19	15	21	35	615	796	223	140	44
15	173	60	32	15	18	23	36	807	991	209	88	43
16	120	48	32	16	21	24	38	800	1060	197	171	46
17	137	57	33	16	19	23	39	820	1100	185	181	106
18	112	52	32	12	20	25	33	863	1080	144	178	88
19	84	67	32	15	18	23	37	1060	920	190	170	74
20	88	43	30	14	22	22	36	1060	870	201	162	66
21	197	52	30	15	21	30	42	935	843	386	132	75
22	159	58	37	16	20	38	53	826	741	337	110	77
23	112	40	39	18	23	30	58	579	709	261	107	101
24	97	41	29	19	22	29	60	462	740	215	113	112
25	116	63	23	19	19	39	51	412	735	182	117	96
26	110	65	27	21	19	35	57	431	622	157	104	96
27	102	58	42	21	19	35	61	516	524	184	82	88
28	97	57	41	23	17	32	76	693	421	178	94	92
29	89	50 45	40	21		27	131	759	678	182	89	81
30	95 91	45	39 38	22 19		34	191	618	493	176	98	71
31	91		38	19		41		593		161	83	
TOTAL	4605	1813	1084	649	513	764	1496	16822	23052	8244	4077	2239
MEAN	149	60.4	35.0	20.9	18.3	24.6	49.9	543	768	266	132	74.6
AC-FT	9130	3600	2150	1290	1020	1520	2970	33370	45720	16350	8090	4440
MAX	307	82	43	37	23	41	191	1060	1100	541	186	112
MIN	84	40	23	12	13	15	29	148	421	144	81	43
CAL YR	2006	TOTAL		MEAN	192 MAX	140		10	AC-FT	139000		
WTR YR	2007	TOTAL	65358 N	1EAN	179 MAX	110	0 MIN	12	AC-FT	129600		

MAX DISCH: 1410 CFS AT 21:00 ON Jun. 17, 2007 GH 5.38 FT. GH CORR. 0.02 FT. SHIFT 0 FT. MAX GH: 5.40 FT. (GH CORR 0.02 FT. APPLIED) AT 21:00 ON Jun. 17, 2007

### 07084500 LAKE CREEK ABOVE TWIN LAKES RESERVOIR CO WY2007 HYDROGRAPH



#### ARKANSAS RIVER BASIN

#### LAKE CREEK BELOW TWIN LAKES RESERVOIR, CO

LOCATION.--Lat 39°04'34", long 106°18'35", in NE4SE4, sec. 22, T.11 S., R. 80 W., Lake County, on right bank 1.2 miles upstream from confluence of Lake Creek and Arkansas River and 1500 ft downstream of Twin Lakes Dam.

GAGE.--Graphic water-stage recorder, satellite-monitored data collection platform (Sutron high data rate SatLink DCP) and shaft encoder in a concrete shelter and well. Primary record is satellite-monitored data with the graphic chart recorder used for backup purposes. Shaft encoder and chart are set to an inside electric tape-down mounted on instrument shelf. Outside staff gage installed in flume but generally used as backup to primary reference tape-down gage. On June 27, 2007, the chart recorder was replaced by an SDR. Control is a 30-foot concrete Parshall flume. Elevation of gage is 9,200 ft. above mean sea level.

REMARKS.--Record is complete and reliable for the entire year. The maximum flow that can be safely waded in the flume is about 250 cfs (gage height = 1.61 ft). Flows up to about 400 cfs (gage height = 2.20 ft) can be waded about 150 ft downstream of the flume. There is no bridge at this flume. Record good. Station maintained and record developed by L.R. Schultz.

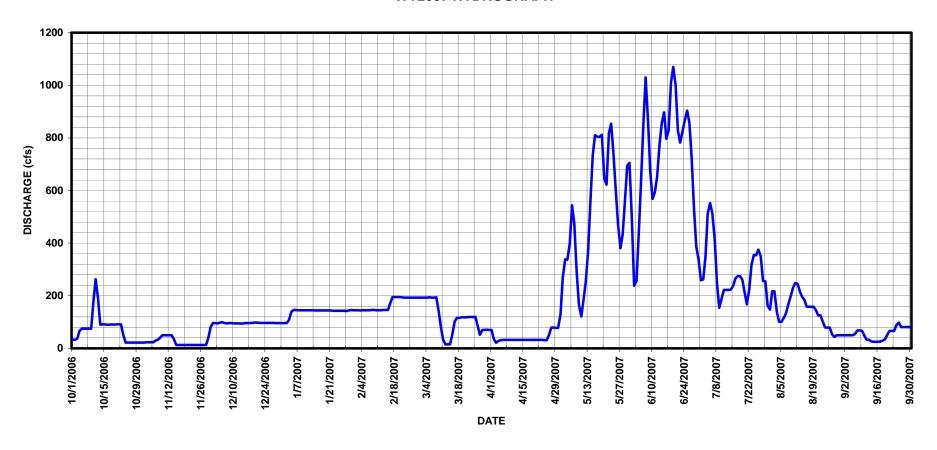
RATING TABLE.--STD30FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE,	ΙN	CFS,	WATER	YEAR	OCTOBER	2006	J.O	SEPTEMBER	2007	
			1	MEAN '	VALUES					

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	22	96	96	145	193	70	129	491	259	217	50
2	33	23	96	96	145	193	36	269	238	262	217	50
3	37	23	95	108	144	193	21	338	256	348	139	50
4	66	23	98	139	145	193	28	337	436	513	101	50
5	75	23	99	146	145	194	31	400	630	552	101	50
6	75	29	96	146	145	193	32	544	855	512	115	55
7	75	33	95	145	145	193	32	476	1030	412	133	68
8	75	41	96	145	146	194	32	291	865	247	167	68
9	75	50	96	145	146	143	32	166	672	154	197	67
10	177	50	95	145	145	82	32	121	568	189	230	48
11	263	50	95	145	145	33	32	185	594	222	248	33
12	190	50	95	145	145	15	32	255	654	222	246	33
13	90	50	94	145	146	15	32	373	776	222	216	27
14	91	35	94	144	146	15	32	554	857	223	196	25
15	91	13	96	144	146	52	32	734	897	238	183	25
16	90	13	96	144	171	102	32	810	796	265	158	25
17	90	13	96	144	195	116	32	804	828	275	158	26
18	91	13	97	144	195	116	32	804	1010	275	158	29
19	90	13	98	144	195	118	32	812	1070	261	158	34
20	91	13	98	144	195	118	32	646	1000	213	145	52
21	91	13	97	144	194	118	32	622	828	167	125	66
22	91	13	97	143	193	119	32	818	782	223	125	66
23	52	13	97	143	193	119	32	854	825	317	101	66
24	22	13	97	143	193	119	31	743	867	355	79	89
25	22	13	97	143	193	119	31	599	904	354	79	98
26	22	13	97	143	193	85	52	472	857	375	79	81
27	22	13	97	143	193	52	79	381	725	350	53	81
28	22	13	96	142	193	70	79	433	529	256	44	81
29	22	43	96	144		70	78	560	387	255	50	81
30 31	22	82	96 96	146		71 70	78 	695	335	162	50	81
31	22		96	145		70		705		147	50	
TOTAL	2308	809	2984	4333	4675	3483	1190	15930	21562	8825	4318	1655
MEAN	74.5	27.0	96.3	140	167	112	39.7	514	719	285	139	55.2
AC-FT	4580	1600	5920	8590	9270	6910	2360	31600	42770	17500	8560	3280
MAX	263	82	99	146	195	194	79	854	1070	552	248	98
MIN	22	13	94	96	144	15	21	121	238	147	44	25
CAL YR	2006	TOTAL	74584	MEAN	204 MAX	1160	MIN	13	AC-FT	147900		
WTR YR	2007	TOTAL	72072	MEAN	197 MAX	1070	MIN	13	AC-FT	143000		

MAX DISCH: 1090 CFS AT 21:00 ON Jun. 19, 2007 GH 4.11 FT. SHIFT 0 FT. MAX GH: 4.11 FT. AT 21:00 ON Jun. 19, 2007

### LAKE CREEK BELOW TWIN LAKES RESERVOIR CO WY2007 HYDROGRAPH



#### ARKANSAS RIVER BASIN

#### 07086000 ARKANSAS RIVER AT GRANITE, CO

LOCATION.--Lat 39°02'34", long 106°15'55", in SE4SW4 sec. 31, T.11 S., R.79 W., Chaffee County, Hydrologic Unit 11020001, on right bank at Granite, 100 ft east of U.S. Highway 24, 100 ft downstream from county bridge, and 200 ft upstream from Cache Creek.

DRAINAGE AREA AND PERIOD OF RECORD. -- 427 mi<sup>2</sup>. Sporadic data from April 1895 to May 1901. Complete data from April 1910 to current year. Monthly data for some periods only.

GAGE. -- Graphic water-stage recorder, Sutron SatLink high data rate satellite-monitored data collection platform (DCP) and shaft encoder in a 4 ft x 4 ft steel shelter over a 42-inch diameter corrugated metal pipe (CMP) well. Shaft encoder and chart set to inside electric tape gage. DCP data are primary record (A-35)chart record is used for back-up purposes). Stock tank heater used inside well during periods of freezing weather to keep well open. Cableway approximately 100 feet downstream from gage. Elevation of gage is 8,914.86 ft above National Geodetic Vertical Datum of 1929, supplementary adjustment of 1960.

REMARKS.--Record is complete and reliable, except for the following periods: Nov. 1, 11-16, 19-22, 24, 26-30; Dec. 1-13, 21, 24, 25, 30, 31, 2006; Jan. 1-3, 5, 7-31; Feb. 1-3, 13-15, 18, 22-28; Mar. 1-5, 29, 30; April 11, 12, 14, 2007, when the stage-discharge relationship was affected by ice; and, Dec. 22, 23, 2006; Jan. 6, 2007, when either intakes or float-tapes were frozen. The shelter and well are situated on the right bank in calm water subject to significant shore ice including complete channel and control freeze-over during periods of freezing weather. Record good, except during periods of no gage height record and ice effect, which are poor. Station maintained and record developed by L.R. Schultz.

DISCHARGE, IN CES. WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- ARKGRNCO11A USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCH	ARGE, IN CI		EAR OCTOBI EAN VALUES	ER 2006	TO SEPTE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	142	225	170	217	259	163	403	960	563	389	215
2	150	131	201	171	218	254	133	566	688	539	393	203
3	162	135	187	187	224	254	113	629	733	621	446	198
4	201	138	189	219	244	260	121	643	928	796	351	202
5	216	134	203	227	218	268	134	669	1200	844	331	199
6	225	141	186		219	274	135	796	1450	814	337	213
7	234	150	188		222	280	140	742	1590	690	349	215
8	233	156	192	230	222	278	146	530	1360	523	382	202
9	234	167	191		224	229	145	392	1120	391	388	197
10	322	167	178	227	226	165	148	338	1030	399	402	179
11	430	153	175	221	225	109	125	427	1090	424	412	153
12	367	152	177	220	227	89	122	573	1270	435	406	149
13	254	149	182		218	103	126	765	1400	461	379	141
14	251	143	193	217	217	107	115	980	1430	418	358	136
15	263	109	190	210	218	143	126	1180	1480	425	362	134
16	257	125	191	211	242	196	133	1320	1410	446	392	135
17	258	122	186	210	261	222	145	1350	1430	460	602	207
18	257	119	188		260	231	153	1320	1650	459	462	199
19	241	113	189	215	277	233	158	1390	1730	460	397	177
20	251	115	187	216	274	233	146	1320	1660	438	365	180
21	253	111	186	213	267	233	153	1270	1410	396	319	193
22	249	110	180	212	269	224	146	1460	1300	438	305	188
23	206	111	185	220	270	227	160	1390	1320	525	274	187
24	157	105	186	219	265	224	174	1200	1340	557	256	210
25	156	111	179	225	254	217	154	1010	1370	548	245	222
26	159	103	177	230	269	195	168	854	1290	570	237	195
27	147	97	180	226	269	160	213	777	1130	564	216	194
28	154	109	176	218	271	186	229	879	901	485	212	196
29	150	157	176	226		170	267	1080	724	471	216	199
30	145	210	172	228		161	317	1200	651	370	219	199
31	144		171	218		165		1180		319	224	
TOTAL	6880	3985	5766		6787	6349	4708	28633	37045	15849	10626	5617
MEAN	222	133	186		242	205	157	924	1235	511	343	187
AC-FT	13650	7900	11440		13460	12590	9340	56790	73480	31440	21080	11140
MAX	430	210	225		277	280	317	1460	1730	844	602	222
MIN	144	97	171	170	217	89	113	338	651	319	212	134
CAL YR	2006	TOTAL	145995		400 MAX		MIN		AC-FT	289600		

MAX DISCH: 1770 CFS AT 02:15 ON Jun. 19, 2007 GH 4.91 FT. SHIFT 0.12 FT. MAX GH: 4.91 FT. AT 02:15 ON Jun. 19, 2007

381 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

138931 MEAN

TOTAL

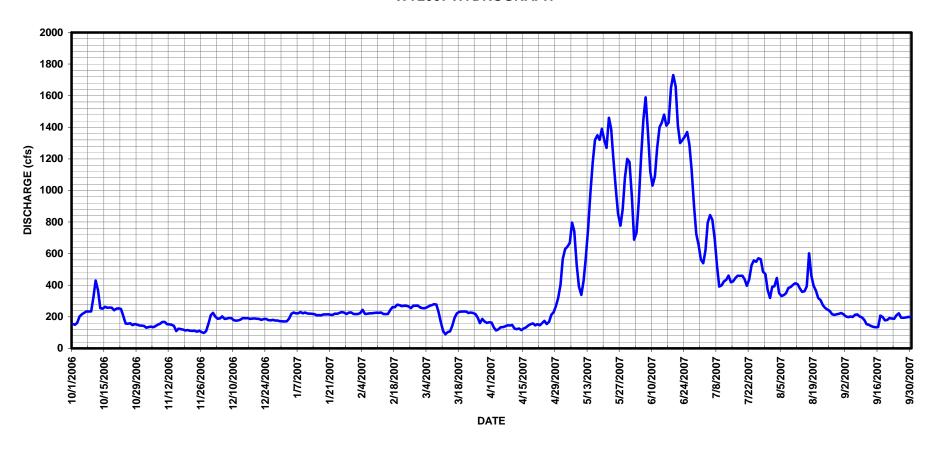
WTR YR 2007

1730 MIN

89 AC-FT

275600

### 07086000 ARKANSAS RIVER AT GRANITE CO WY2007 HYDROGRAPH



#### ARKANSAS RIVER BASIN

#### 07086500 CLEAR CREEK ABOVE CLEAR CREEK RESERVOIR, CO

LOCATION.--Lat 39°01'05", long 106°16'38", in SE4 sec. 12, T,12 S., R.80 W., Chaffee County, Hydrologic Unit 11020001, on right bank 0.5 mi upstream from water line of Clear Creek Reservoir at elevation 8,875 ft, 1.5 mi downstream from unnamed tributary, and 1.9 mi southwest of Granite.

DRAINAGE AREA. -- 67.1 mi<sup>2</sup>.

GAGE.--Graphic water-stage recorder, satellite-monitored data collection platform (Sutron high data rate SaltLink Logger DCP) and shaft encoder in a 42-inch diameter corrugated metal pipe (CMP) shelter and well. Shaft encoder and chart set to inside drop tape gage with adjustable RP on instrument shelf. DCP data are primary record (graphic chart record is used for back-up purposes). Control is a concrete dam tapered lower towards the center, located approximately 15 feet downstream. An outside staff gage is used as a supplemental reference gage. However, since its installation, it does not agree with the inside tape, most likely due to draw-down.

REMARKS.--Record is complete and reliable, except for the following periods: Oct. 19, 27; Nov. 1, 2, 10, 2006; Mar. 30, 31; Apr. 11, 14, 2007, when the stage-discharge relationship was affected by ice; and, Nov. 11, 2006 to March 18, 2007, when the station was closed for the winter. Record good, except during periods of no gage height record and ice effect, which are poor. Station maintained and record developed by L.R. Schultz.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

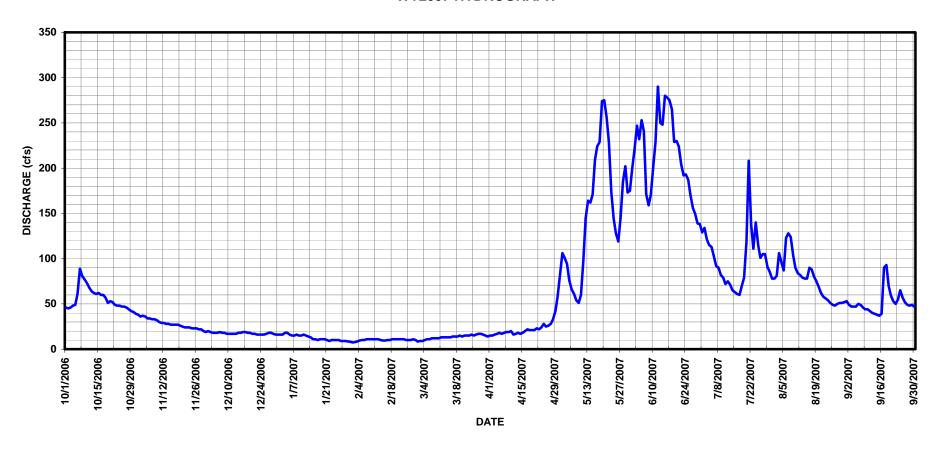
RATING TABLE. -- CCACCRC014 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DIDCII	intol, in c		CAN VALUES		IO DELIE	IIDDIC 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	38	20	16	7.5	8.5	15	82	199	129	78	53
2	45	36	19	16	7.7	9.0	15	106	221	134	81	49
3	46	37	18	18	8.5	9.0	16	101	247	121	106	47
4	48	36		18	9.5	10	17	94	232	115	96	47
5	49	34		16	10	11	18	76	253	113	87	47
6	61	34		15	10	11	17	66	241	103	123	50
7	89	33		15	11	12	18	61	171	92	128	49
8	81	33		16	11	12	19	54	159	90	124	46
9	77	32			11	12	19	51	171	82	104	44
10	73	30			11	12	20	60	202	79	90	44
11	68	29			11	13	16	98	229	72	84	42
12	64	29			11	13	17	144	290	75	82	40
13	62	28			10	13	18	164	250	71	79	39
14	61	28		13	9.5	13	17	162	248	65	78	38
15	62	27		11	9.5	13	18	171	280	63	78	37
16	60	27			10	14	20	209	278	61	90	39
17	60	27			10	14	22	224	275	60	88	90
18	57	27		11	11	14	21	229	265	70	80	93
19	51	26		11	11	15	21	274	229	79	75	70
20	53	25			11	14	21	275	230	119	69	59
21	52	24			11	15	23	256	224	208	62	53
22	49	24		9.0	11	15	22	229	204	138	58	50
23	48	24		10	11	15	24	174	192	111	56	55
24	48	23		10	10	16	28	144	193	140	54	65
25	47	23		10	10	15	25	128	187	115	51	57
26	47	23			10	16	26	119	170	101	49	52
27	46	22		9.0	11	17	28	145	156	105	48	49
28	44	22		9.0	10	17	33	185	149	105	50	48
29	42	20				16	42	202	139	91	51	49
30	41	19				15	58	173	138	85	51	47
31	39		16	8.1		14		175		78	52	
TOTAL	1716	840	543	385.6	285.2	413.5	674	4631	6422	3070	2402	1548
MEAN	55.4	28.0		12.4	10.2	13.3	22.5	149	214	99.0	77.5	51.6
AC-FT	3400	1670		765	566	820	1340	9190	12740	6090	4760	3070
MAX	89	38			11	17	58	275	290	208	128	93
MIN	39	19		8.1	7.5	8.5	15	51	138	60	48	37
CAL YR	2006	TOTAL	21077.5	MEAN	57.7 MAX	330	0 MIN	9.0	AC-FT	41810		
WTR YR		TOTAL	22930.3		62.8 MAX		O MIN	7.5	AC-FT	45480		

MAX DISCH: 364 CFS AT 23:15 ON Jun. 15, 2007 GH 4.23 FT. SHIFT 0.11 FT. MAX GH: 4.23 FT. AT 23:15 ON Jun. 15, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

### 07086500 CLEAR CREEK ABOVE CLEAR CREEK RESERVOIR CO WY2007 HYDROGRAPH



#### ARKANSAS RIVER BASIN

#### CLEAR CREEK BELOW CLEAR CREEK RESERVOIR, NEAR GRANITE, CO

LOCATION. -- Lat 39°01'20", long 106°14'07", Lake County, on left bank 200 ft. upstream from junction Clear Creek and Arkansas River.

DRAINAGE AREA. --N/A.

GAGE.--Float activated graphic water-stage recorder and shaft encoder and Sutron Satlink 2 DCP in a metal-sided wood frame shelter and concrete well. Shaft encoder and chart set to inside drop tape gage with adjustable RP on instrument shelf. Outside gage used as supplemental reference. Outside gage reads 0.01 ft low. DCP data are primary record (graphic chart record is used for back-up purposes). Control is a 20-ft. wide, compound, thin plate weir located at the gage.

REMARKS.--Record is complete and reliable. Record good. Station maintained and record developed by L.R. Schultz.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

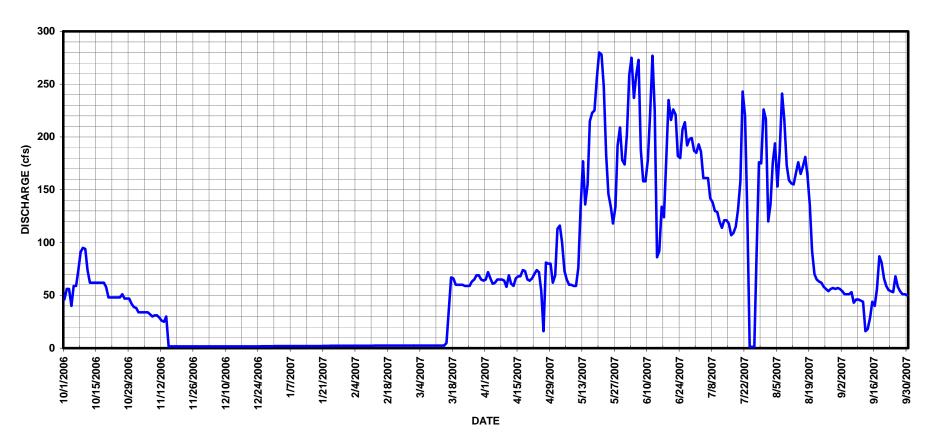
RATING TABLE. -- CCBCCRCO04 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCH	ARGE, IN C		MEAN VALUE		IO SEPIE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	38	1.6	2.0	2.2	2.4	65	69	202	185	120	56
2	56	34	1.6	2.0	2.2	2.4	72	113	259	193	136	54
3	56	34	1.6	1.9	2.2	2.4	66	116	275	186	176	51
4	40	34	1.6	2.0	2.2	2.4	61	100	237	161	194	51
5	59	34	1.7	2.0	2.2	2.5	62	73	258	161	153	51
6	59	34	1.7	2.0	2.2	2.5	65	65	273	161	186	53
7	73	32	1.7	2.0	2.2	2.5	65	60	188	142	241	43
8	91	30	1.6	2.0	2.2	2.5	65	60	158	138	216	46
9	95	31	1.6	2.0	2.2	2.5	64	59	158	130	173	46
10	94	31	1.6		2.2	2.5	58	59	178	129	159	45
11	74	29	1.6	2.0	2.2	2.5	69	76	221	120	156	44
12	62	26	1.6	2.0	2.4	2.5	61	132	277	114	155	16
13	62	25	1.6	2.0	2.4	2.5	59	177	225	121	166	18
14	62	30	1.7	2.0	2.4	2.5	66	136	86	121	176	29
15	62	1.7	1.7	2.0	2.4	4.9	68	155	92	118	165	44
16	62	1.6			2.4	35	68	215	134	107	172	40
17	62	1.6	1.7	2.0	2.4	67	74	223	124	109	181	56
18	62	1.6			2.4	66	73	225	180	115	163	87
19	58	1.6	1.7	2.0	2.4	60	65	256	235	131	135	81
20	48	1.6	1.7		2.4	60	64	280	216	158	92	66
21	48	1.6	1.7	2.1	2.4	60	66	278	226	243	70	59
22	48	1.6	1.7		2.4	60	70	248	221	220	65	55
23	48	1.6			2.4	59	74	183	182	128	63	54
24	48	1.6		2.2	2.4	59	72	146	180	1.3	62	53
25	48	1.6	1.8	2.2	2.4	59	54	134	207	1.2	58	68
26	51	1.6			2.4	63	16	118	214	1.2	56	58
27	47	1.6			2.4	65	81	134	192	88	54	54
28	47	1.6	1.8	2.2	2.4	69	80	192	198	176	56	51
29	47	1.6	1.8	2.2		69	80	209	199	175	57	51
30	42	1.6	1.8	2.2		65	62	178	187	226	56	50
31	39		1.9	2.2		64		174		217	57	
TOTAL	1796	467.7	52.5	63.8	65.0	1019.5	1965	4643	5982	4276.7	3969	1530
MEAN	57.9	15.6			2.32	32.9	65.5	150	199	138	128	51.0
AC-FT	3560	928			129	2020	3900	9210	11870	8480	7870	3030
MAX	95	38	1.9	2.2	2.4	69	81	280	277	243	241	87
MIN	39	1.6	1.6	1.9	2.2	2.4	16	59	86	1.2	54	16
CAL YR WTR YR	2006 2007	TOTAL TOTAL	20740.4 25830.2	MEAN MEAN	56.8 MAX		3 MIN 0 MIN		AC-FT AC-FT	41140 51230		

MAX DISCH: 355 CFS AT 11:00 ON Oct. 26, 2006 GH 3.05 FT. SHIFT 0.03 FT. MAX GH: 3.05 FT. AT 11:00 ON Oct. 26, 2006

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

### CLEAR CREEK BELOW CLEAR CREEK RESERVOIR NEAR GRANITE CO WY2007 HYDROGRAPH



#### ARKANSAS RIVER BASIN

#### 07089520 COTTONWOOD CREEK AT BUENA VISTA, CO

LOCATION.--Lat 38°50'08", long 106°07'17", in NW4NW4NW4, sec. 16, T.14 S., R. 78 W., in Chaffee County, on left bank, about 1500 ft. upstream from Arkansas River, and 1200 ft. upstream from bridge at Buena Vista High School.

DRAINAGE AREA. -- N/A.

WTR YR 2007

GAGE.--Graphic water-stage recorder, satellite-monitored data collection platform (Sutron SatLink HDR DCP) and shaft encoder in a 42-inch corrugated metal pipe shelter and well. Shaft encoder and chart set to inside drop tape gage with adjustable RP on instrument shelf. Outside staff gage used for supplemental reference. Satellite-monitored data are the primary record (graphic chart record is used for back-up purposes). Datum of gage 7930 ft. from topographic map.

REMARKS.--Record is complete and reliable, except for the following periods: Nov. 13-15, 27, 30; Dec. 1-9, 12, 18-27, 31, 2006; Jan. 1-4, 6-10, 13-31; Feb. 1-5, 14-18, 24-27; Mar. 1-4; Apr. 14, 2007, when ice affected the stage-discharge relationship. Record good, except during periods of ice effect, which are poor. Station maintained and record developed by L.R. Schultz.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- COCRBVC004 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	1.6	29	26	26	27	21	19	22	56	19	3.0	2.4	
2	.98	28	25	26	26	23	17	30	74	15	2.5	2.3	
3	1.5	30	23	28	29	23	15	24	82	13	15	2.4	
4	2.6	29	24	28	30	23	16	36	91	12	15	2.8	
5	3.1	26	28	29	31	23	15	23	106	16	24	2.7	
6	4.8	29	32	24	32	22	16	15	134	18	37	3.6	
7	13	33	33	24	28	21	12	14	88	14	34	3.0	
8	16	34	31	29	25	21	7.3	7.6	62	11	35	2.3	
9	19	34	31	25	24	21	6.4	2.7	72	6.2	24	2.0	
10	25	33	32	26	24	21	7.5	1.2	84	3.0	19	1.9	
11	28	30	32	28	24	20	5.9	6.2	92	2.4	17	1.3	
12	25	34	31	26	24	20	4.4	27	122	4.8	17	1.2	
13	21	30	31	24	23	20	4.2	47	118	12	16	1.1	
14	15	32	31	23	22	21	3.5	55	107	4.3	15	.89	
15	20	33	31	20	23	21	3.9	68	107	1.9	14	1.8	
16	20	36	31	19	23	20	4.6	60	110	2.2	19	2.4	
17	18	37	30	20	22	18	9.6	63	105	2.9	20	6.9	
18	17	37		23	22	18	8.4	56	101	3.0	16	14	
19	14	35	30	24	23	18	5.3	80	83	7.1	14	7.2	
20	18	34		28	23	18	2.1	100	73	9.7	10	4.1	
21	20	34		30	23	18	1.5	87	65	16	6.5	2.4	
22	18	34		25	23	18	1.5	85	55	24	6.0	2.4	
23	17	33		27	22	18	1.6	44	53	10	4.7	2.4	
24	26	32		28	20	22	3.7	32	48	9.5	4.4	2.5	
25	28	33		30	19	22	2.6	24	43	5.8	4.3	2.4	
26	31	32		31	21	19	2.4	21	39	5.7	2.7	2.4	
27	30	31		30	22	19	2.7	30	37	6.1	3.1	2.3	
28	31	34		30	22	20	4.4	56	33	17	5.4	2.3	
29	31	31		31		19	12	79	28	10	1.9	2.4	
30	30	25		30		19	23	53	23	8.3	2.1	3.4	
31	30		28	30		19		44		4.9	2.7		
TOTAL	575.58	962	901	822	677	626	238.5	1292.7	2291	294.8	410.3	91.19	
MEAN	18.6	32.1	29.1	26.5	24.2	20.2	7.95	41.7	76.4	9.51	13.2	3.04	
AC-FT	1140	1910	1790	1630	1340	1240	473	2560	4540	585	814	181	
MAX	31	37		31	32	23	23	100	134	24	37	14	
MIN	.98	25	23	19	19	18	1.5	1.2	23	1.9	1.9	.89	
CAL YR	2006	TOTAL	8128.36	MEAN	22.3 MAX	11	O MIN	.44	AC-FT	16120			

MAX DISCH: 165 CFS AT 04:00 ON Jun. 6, 2007 GH 3.24 FT. SHIFT 0.05 FT. MAX GH: 3.24 FT. AT 04:00 ON Jun. 6, 2007

25.2 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

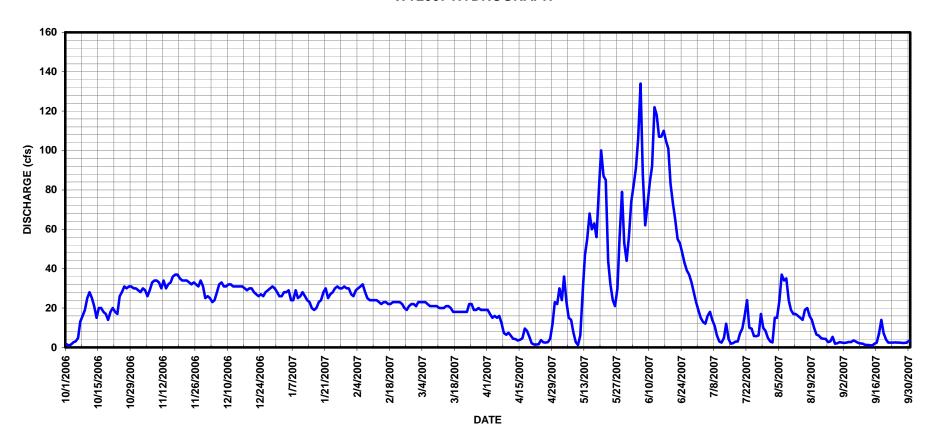
TOTAL 9182.07 MEAN

134 MIN

.89 AC-FT

18210

### 07089520 COTTONWOOD CREEK AT BUENA VISTA CO WY2007 HYDROGRAPH



#### 07091000 CHALK CREEK AT NATHROP, CO

LOCATION.--Lat 38°44'30", long 106°04'57", in SW4SE4NE4SW4 sec. 14, T.15 S., R.78 W., Chaffee County, on left bank, 640' north of the Junction of Co. Hwy. 162 and U.S. 285 on the frontage rd. parallel to U.S. 285, % mi. south of Nathrop, Co., and 1 mi. west of the confluence of Chalk Creek and the Arkansas River.

DRAINAGE AREA. --N\A.

GAGE.--Graphic water-stage recorder, satellite-monitored data collection platform (Sutron SatLink Logger HDR DCP) and shaft encoder in 32-inch diameter corrugated metal pipe (CMP) shelter and well. Shaft encoder and chart set to inside drop tape gage with adjustable RP on instrument shelf. DCP data are primary record (graphic chart record is used for back-up purposes). Outside staff gage also used for reference purpose. Station also equipped with tipping bucket rain gage. Control is a concrete dam, tapered lower towards the center, located approximately 5 feet downstream. Elevation of gage 7680 ft. (from topographic map).

REMARKS.--Record is complete and reliable, except for the following periods: Nov. 30; Dec. 3, 22, 25, 2006; Jan. 2, 6, 7, 13-19, 22; Feb.1, 2; Mar. 3, 2007, when ice affected the stage-discharge relationship. Record good, except during periods of ice effect, which are poor. Station maintained and record developed by L.R. Schultz.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

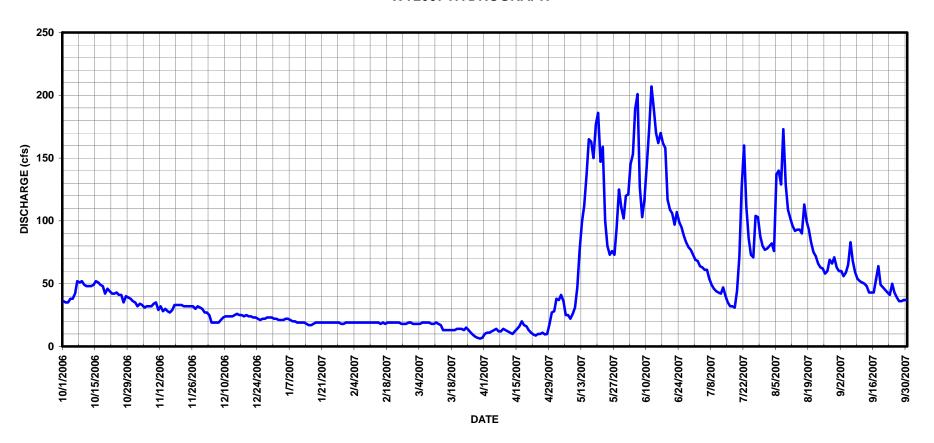
RATING TABLE. -- CHCRNACO07 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	36	35	27	22	19	18	10	28	120	69	78	60	
2	35	32	27	21	19	18	11	38	121	68	80	60	
3	35	34	25	21	19	18	11	37	145	64	82	56	
4	38	33	19	21	19	18	12	41	153	63	76	59	
5	38	31	19	22	19	19	13	36	189	61	137	65	
6	42	32	19	22	19	19	14	25	201	61	140	83	
7	52	32		21	19	19	12	25	127	54	129	68	
8	51	32		20	19	19	12	22	103	49	173	59	
9	52	34		20	19	18	14	26	117	46	129	54	
10	49	35		19	19	18	13	31	145	44	109	52	
11	48	29		19	19	19	12	47	172	43	102	51	
12	48	32		19	19	18	11	76	207	42	96	50	
13	48	28		19	19	17	10	99	190	47	92	48	
14	49	30		18	19	13	12	112	170	40	93	43	
15	52	28		17	18	13	14	137	162	35	93	43	
16	51	27		17	19	13	16	165	170	32	90	43	
17	49	29		18	18	13	20	163	162	32	113	53	
18	48	33		19	19	13	17	150	158	31	100	64	
19	42	33		19	19	13	16	177	117	44	93	49	
20	46	33		19	19	14	13	186	109	72	83	47	
21	44	33	24	19	19	14	11	147	106	126	75	45	
22	42	32	23	19	19	14	9.6	159	97	160	72	43	
23	42	32	23	19	19	13	8.7	100	107	112	66	41	
24	43	32	22	19	18	15	10	80	99	86	63	50	
25	41	32	21	19	18	13	10	73	95	73	62	43	
26	41	32	22	19	18	11	11	76	88	71	58	39	
27	35	30	22	19	19	9.1	9.6	73	83	104	60	36	
28	40	32	23	19	19	7.6	10	94	79	103	69	36	
29	39	31	23	18		6.8	18	125	77	88	66	37	
30	38	30	23	18		6.2	27	111	73	80	71	37	
31	36		22	19		7.0		102		77	63		
TOTAL	1350	948		600	527	446.7	387.9	2761	3942	2077	2813	1514	
MEAN	43.5	31.6		19.4	18.8	14.4	12.9	89.1	131	67.0	90.7	50.5	
AC-FT	2680	1880		1190	1050	886	769	5480	7820	4120	5580	3000	
MAX	52	35		22	19	19	27	186	207	160	173	83	
MIN	35	27	19	17	18	6.2	8.7	22	73	31	58	36	
CAL YR WTR YR	2006 2007	TOTAL TOTAL	13438.7 18083.6	MEAN MEAN	36.8 MAX 49.5 MAX	18 20	35 MIN )7 MIN	1.4 6.2	AC-FT AC-FT	26700 35870			

MAX DISCH: 249 CFS AT 02:15 ON Jun. 6, 2007 GH 4.39 FT. SHIFT 0.01 FT. MAX GH: 4.39 FT. AT 02:15 ON Jun. 6, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 07091000 CHALK CREEK AT NATHROP CO WY2007 HYDROGRAPH



#### 07091500 ARKANSAS RIVER AT SALIDA, CO

LOCATION.--Lat 38°32'45", long 106°00'36", in NE4 sec. 31, T.50 N., R.9 E., Chaffee County on right bank at Salida, 450 ft. upstream from bridge on State Highway 291, and 2.7 mi. upstream from South Arkansas River.

DRAINAGE AREA. -- 1, 218 mi<sup>2</sup>.

GAGE.--Graphic water-stage recorder, satellite-monitored data collection platform (Sutron Model 8210 DCP with high data rate transmitter) and shaft encoder in a 4'x 4' steel shelter placed over a stilling well. Shaft encoder and chart set to inside drop tape gage with adjustable RP on instrument shelf (augmented by an outside staff gage). Outside gage is set 0.01 ft low. DCP log data are primary record (satellite data and A-35 chart used for back-up purposes). As of Mar. 10, 2007, old headwall was removed and on Mar. 16, 2007, new headwall was completed. No new outside staff gage has been installed as of yet. Cableway approximately 35 feet downstream from gage. Sutron 8210 DCP failed and was replaced with Satlink2 on Sept. 20, 2007. Datum of gage is 7,050.45 ft.

REMARKS.--Record is complete and reliable, except for the following periods: Nov. 30; Dec. 4-18, 2006; Jan. 14-17, 20-28; Feb. 6, 10-13, 16-21, 23-26, 2007, when gage height was affected by ice on the control; and, Mar. 12-16, 2007, while the new headwall was being constructed. Record good, except for those periods of ice affected record, and the period of missing record during headwall construction, which are poor. Station maintained and record developed by L.R. Schultz.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

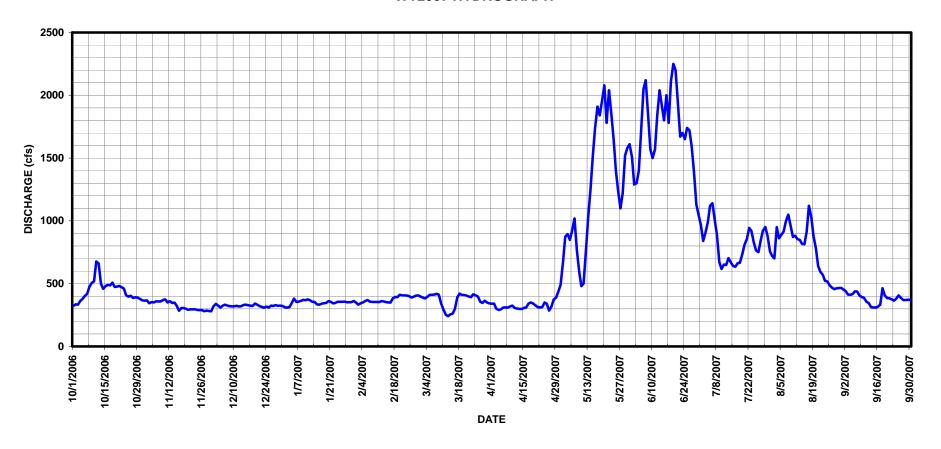
RATING TABLE. -- ARKSALCO29 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	CAN VALUES	3					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	323	365	320		349	398	340	491	1510	965	720	454
2	335	367	339		333	388	341	671	1290	840	701	439
3	333	344	325	313	344	382	301	874	1300	904	951	413
4	360	353	310		351	394	290	895	1400	988	861	411
5	378	350	325		362	410	296	848	1710	1120	889	417
6	401	359	332		370	411	310	923	2050	1140	915	438
7	419	358	325		357	413	311	1020	2120	1010	997	437
8	474	358	321		354	419	310	776	1840	891	1050	405
9	505	369	319		354	413	318	597	1570	671	964	394
10	518	374	320		354	342	325	480	1500	617	872	386
11	677	351	324		353	296	307	499	1570	653	882	357
12	660	361	318		360	252	302	765	1840	649	855	345
13	501	347	320		358	241	299	1030	2040	703	848	313
14	459	349	330		353	255	298	1260	1920	669	817	311
15	481	324	333		351	261	307	1520	1800	641	814	310
16	490	284	329		349	300	310	1740	2000	635	913	316
17	487	306	325		382	391	342	1910	1780	662	1120	334
18	508	306	322		394	420	350	1840	2110	666	1030	464
19	474	300	341		392	410	341	1960	2250	734	880	406
20	476	292	333		411	409	327	2080	2200	810	782	385
21	482	296	321		407	405	314	1780	1930	856	641	383
22	471	295	315		406	397	311	2040	1670	944	594	375
23	461	295	308		405	392	313	1860	1700	920	571	365
24	406	290	317		401	415	350	1650	1650	828	522	380
25	396	289	310	355	390	406	339	1400	1740	765	517	407
26	404	289	325		395	397	285	1240	1720	751	487	387
27	386	280	323		404	356	318	1100	1590	844	469	370
28	391	286	329		406	346	374	1220	1390	922	456	369
29	388	282	324			364	389	1520	1130	951	463	371
30	378	280	325			349	437	1580	1050	880	465	372
31	367		322	362		343		1610		757	466	
TOTAL	13789	9699	10030		10445	11375	9755	39179	51370	25386	23512	11514
MEAN	445	323	324	351	373	367	325	1264	1712	819	758	384
AC-FT	27350	19240	19890	21560	20720	22560	19350	77710	101900	50350	46640	22840
MAX	677	374	341	381	411	420	437	2080	2250	1140	1120	464
MIN	323	280	308	310	333	241	285	480	1050	617	456	310
CAL YR WTR YR	2006 2007	TOTAL TOTAL	212781 226922	MEAN MEAN	583 MAX 622 MAX	2510 2250	O MIN O MIN	244 241	AC-FT AC-FT	422000 450100		

MAX DISCH: 2300 CFS AT 07:30 ON Jun. 19, 2007 GH 5.10 FT. SHIFT 0.03 FT. MAX GH: 5.10 FT. AT 07:30 ON Jun. 19, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 07091500 ARKANSAS RIVER AT SALIDA CO WY2007 HYDROGRAPH



#### 07093700 ARKANSAS RIVER NEAR WELLSVILLE, CO

LOCATION.--Lat 38°30'10", long 105°56'21", in SW4NE¼ sec. 14, T.49 N., R.9 E., Chaffee County, Hydrologic Unit 11020001, on right bank 50 ft upstream from Chaffee-Fremont County line, 2.0 mi northwest of Wellsville, 2.8 mi downstream from South Arkansas River, and 3.5 mi southeast of Salida.

DRAINAGE AREA AND PERIOD OF RECORD. -- 1,485 mi<sup>2</sup>. April 1961 to current year.

GAGE.--Station is equipped with a satellite-monitored data collection platform (Sutron 8210 DCP) with a Sutron Accububbler. The 8210 DCP log is the primary record, the satellite-monitored data are used as back-up. Accububbler set to outside horizontal chain weight gage. Concrete flood block with provisions for high and low stage orifice lines installed September 2002. New orifice lines were installed Aug. 28, 2003. Cableway located 400 feet downstream from gage. The accububbler was replaced on September 14, 2007. Datum of gage is 6,883.4 ft above National Geodetic Vertical Datum of 1929 (river-profile survey).

REMARKS.--Record is is complete and reliable only during the following periods: Oct. 1, 2006 through Jan. 11, 2007, and September 15, 2007 to the end of the water year. As of Jan. 12, 2007, the orifice froze solid, apparently causing a rupture or partial tearing of the diaphragm in the accubar in the accubabler, resulting in variable pressure-losses. This became more apparent during high-water, as the device did not track well with large stage changes. Based on this, the record is considered unreliable from Jan. 12, 2007 through September 14, 2007, when the accubabler was replaced. Of note during this period: Nov. 28-30; Dec. 1-5, 9, 22-26, 31, 2006; Jan. 2, 3, 5-9; Feb. 15; Mar. 2-5, 2007, the orifice line was temporarily frozen and ice affected the gage height; Jan. 12-31; Feb. 1-13, 2007 the orifice was fully frozen within the flood block; June 28-July 2, 2007, the accubabbler tracking problems were noted when flows during this period of falling stage did not correspond with flows at the Arkansas River at Salida gage located ~5.5 miles upstream; and, July 3-6, 2007, when the DCP malfunctioned. Record is good from Oct 1, 2006 through Jan 11, 2007, and September 15, 2007 to the end of the water year. Record is poor from Jan 12, 2007 through September 14, 2007, due to orifice freezing, and DCP and Accubabbler malfunction. Plotting of the dual (Salida and Wellsville) hydrographs revealed that the flows during the period of falling stage of June 28- July 2, 2007, did not correspond with flows at Salida. Consequently, that period was estimated based on flows at Salida and should be considered poor also. The peak for the water year also occurred during the period of suspect accubabbler operationa and should be considered poor. Station maintained and record developed by L.R. Schultz.

### 07093700 ARKANSAS RIVER NEAR WELLSVILLE, CO

RATING TABLE. -- ARKWELCOO6A USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE,	IN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007
			T.	/ MARN	/ATJUES				

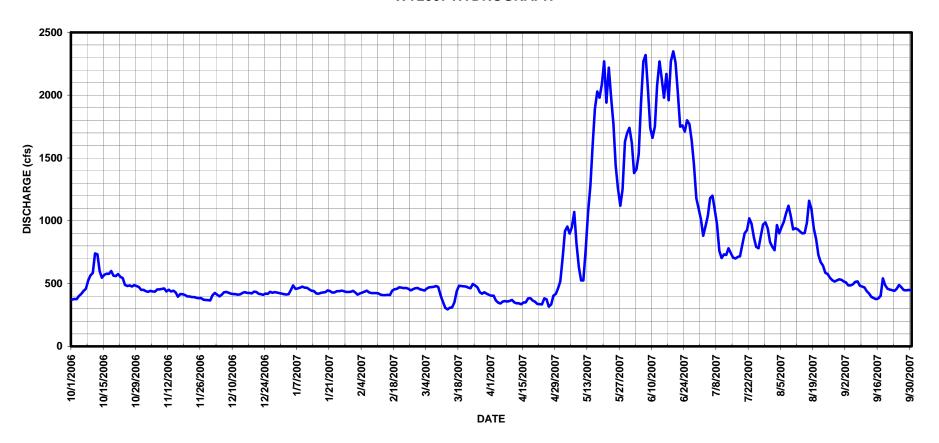
DAY   OCT   NOV   DEC   JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP													
2 377 440 426 413 411 450 404 711 1380 880 766 509 3 3 376 434 412 416 422 445 366 918 1410 954 966 486 48 400 442 397 449 428 460 348 955 1530 1040 900 485 5 418 437 412 445 436 470 341 898 1930 1180 951 495 66 486 481 481 436 431 458 443 472 337 949 2270 1200 992 514 77 459 453 433 461 429 474 360 1070 2320 1090 1060 517 8 524 454 458 419 467 424 480 357 819 2040 974 1120 483 9 564 458 419 467 424 480 357 819 2040 974 1120 483 9 564 458 419 467 424 473 362 629 1740 759 1040 477 10 585 461 417 468 424 405 369 525 1660 704 932 469 11 740 437 416 466 422 355 351 525 1750 733 940 440 12 733 451 411 454 412 307 343 778 2080 727 933 421 13 598 437 414 442 408 294 343 1060 2270 781 915 394 14 546 444 425 441 408 307 335 1280 2130 782 793 3421 13 598 437 414 442 408 294 343 1060 2270 781 915 394 14 546 444 442 5 441 408 307 335 1280 2130 742 900 385 15 570 429 432 422 410 311 349 1600 1980 706 902 376 16 579 395 426 419 408 350 350 1890 2170 699 984 381 17 577 417 426 426 426 444 441 382 2030 1960 712 1160 403 18 600 415 422 430 455 483 384 1980 2270 778 1909 542 19 563 409 436 432 458 480 365 2090 2350 813 940 488 20 560 397 433 446 470 478 355 2270 2260 901 853 459 21 576 398 419 440 468 477 338 1940 2170 699 984 381 17 577 417 426 426 426 444 441 382 2030 1960 712 1160 403 18 600 415 422 430 455 483 384 1980 2270 778 1909 542 22 553 398 419 440 468 477 338 1940 2010 926 728 452 22 553 398 419 440 468 477 338 1940 2010 926 728 452 22 553 398 419 440 468 477 338 1940 2010 926 728 452 442 448 488 370 433 446 470 478 355 2270 2260 901 853 459 21 576 398 419 440 468 477 338 1940 2010 926 728 452 442 448 488 370 433 446 470 478 358 1940 2010 926 728 452 442 448 488 370 433 446 470 478 358 1940 2010 926 728 452 442 448 488 370 433 446 470 478 358 1940 2010 926 728 452 448 488 370 433 446 470 478 358 1940 2010 926 728 454 444 455 470 478 358 1940 2010 926 728 448 454 455 470 478 358 1940 2010 926 728 156 448 458 458 458 458 458 458 458 458 458	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
3 376 434 412 416 422 445 366 918 1410 954 966 486 4 400 442 397 449 428 460 348 955 1530 1040 900 485 5 418 437 412 485 436 470 341 898 1930 1180 951 495 6 441 436 431 458 443 472 357 949 2270 1200 992 514 7 459 453 433 461 429 474 360 1070 2320 1090 1060 517 8 524 454 427 467 424 480 357 819 2040 974 1120 483 9 564 458 419 475 424 473 362 629 1740 759 1040 477 10 585 461 417 468 424 405 369 525 1660 704 932 469 11 740 437 416 466 422 355 351 525 1750 733 940 440 12 733 451 411 454 412 307 343 778 2080 727 933 421 13 598 437 414 442 408 294 343 1060 2270 781 915 394 14 546 444 425 441 408 397 335 1280 2130 742 900 385 15 570 429 432 422 410 311 349 1600 1880 706 902 376 16 579 395 426 419 408 350 350 1890 2170 699 984 381 17 777 417 426 426 444 413 382 2030 1890 2170 699 984 381 17 577 417 426 426 444 413 382 2030 1890 2170 699 984 381 17 577 417 426 426 444 413 382 2030 1960 712 1160 403 18 600 415 422 430 455 483 384 1980 2270 718 1090 542 19 563 409 436 432 458 483 384 1980 2270 718 1090 542 19 563 409 436 432 458 480 365 2090 2350 813 940 488 20 560 397 433 446 470 478 355 2200 2350 813 940 488 20 560 397 433 446 470 478 355 2200 2550 813 940 488 20 560 397 433 446 470 478 355 2200 2550 813 940 488 20 560 397 433 446 470 478 355 2270 718 1090 552 21 576 398 419 440 468 477 478 355 2270 718 1090 552 22 553 382 415 428 464 468 336 220 1750 1020 671 447 23 544 392 410 430 465 462 334 1990 1760 977 642 442 24 489 386 420 439 459 497 382 1770 1710 867 586 458 25 480 384 418 439 466 484 374 1440 1800 792 576 489 26 485 385 488 370 432 433 465 419 40 1250 1450 970 516 486 29 480 386 428 433 4410 481 1630 1180 987 525 488 30 477 372 427 439 463 431 134 184 184 880 883 460 26 485 386 428 433 4410 481 100 1740 830 530 530 530 530 530 530 530 530 530 5	1	372	450	406	415	428	455	403	519	1620	1010	792	517
4 400 442 397 449 428 460 348 955 1530 1040 900 485 5 186 1930 1180 991 495 6 418 437 412 485 436 470 341 898 1930 1180 991 495 6 441 436 431 458 443 472 357 949 2270 1200 992 514 7 459 453 433 461 429 474 360 1070 2320 1090 1060 517 8 524 454 454 427 467 424 480 357 819 2040 974 1120 483 9 564 458 419 475 424 473 362 629 1740 759 1040 477 10 585 461 417 468 424 405 369 525 1660 704 932 469 11 740 437 416 466 422 355 351 525 1750 733 940 440 12 733 451 411 454 412 307 343 778 2080 727 933 421 13 598 437 414 442 408 294 343 1060 2270 781 915 394 14 546 444 4425 441 408 294 343 1060 2270 781 915 394 14 546 444 4425 441 408 307 335 1280 2130 742 900 385 15 570 429 432 422 410 311 349 1600 1980 706 902 376 16 579 395 426 419 408 350 350 1890 2170 699 984 381 77 577 417 426 426 444 441 382 2030 1960 712 1160 403 18 600 415 422 430 455 483 384 1980 2270 718 1000 542 19 563 409 436 432 485 480 365 2090 2350 813 940 440 422 489 386 20 560 397 433 446 470 478 355 2270 2260 901 833 459 21 576 398 419 440 440 440 470 478 355 2270 2260 901 833 459 21 576 398 419 440 440 440 470 478 355 2270 2260 901 833 459 21 576 398 419 440 440 440 470 478 355 2270 2260 901 83 459 422 429 430 455 483 384 1980 2270 718 1090 542 1576 398 419 440 440 468 477 338 1940 2010 926 728 452 22 553 392 415 428 464 468 470 378 394 1900 7760 977 642 442 24 489 386 420 439 459 497 382 1770 1710 867 586 458 25 480 384 418 439 440 468 470 378 394 1900 7760 977 642 442 24 489 386 420 439 459 497 382 1770 1710 867 586 458 22 5480 384 418 439 446 484 374 140 1800 792 576 489 360 368 428 433	2	377	440	426	413	411	450	404	711	1380	880	766	509
5 418 437 412 485 436 470 341 898 1930 1180 951 495 6 441 436 431 458 443 472 357 949 2270 1200 992 514 7 459 459 459 459 459 459 459 459 459 459	3	376	434	412	416	422	445	366	918	1410	954	966	486
5 418 437 412 485 436 470 341 898 1930 1180 951 495 6 441 436 441 436 431 458 443 472 357 949 2270 1200 992 514 7 459 453 433 461 429 474 360 1070 2320 1090 1060 517 8 524 454 427 467 424 480 357 819 2040 974 1120 483 9 564 458 419 475 424 473 362 629 1740 759 1040 477 10 585 461 417 468 424 405 369 525 1660 704 932 469 11 740 437 416 466 422 355 351 525 1750 733 940 440 12 733 451 411 454 412 307 343 778 2080 727 933 421 13 598 437 414 442 408 294 343 1060 2270 781 915 394 14 546 444 425 441 408 294 343 1060 2270 781 915 394 14 546 444 425 441 408 307 335 1280 2130 742 900 385 15 570 429 432 422 410 311 349 1600 1980 706 902 376 16 579 395 426 419 408 350 350 1890 2170 699 984 381 17 577 417 426 426 444 441 382 2030 1960 712 1160 403 18 600 415 422 430 455 483 384 1980 2270 718 1090 542 19 563 409 436 432 458 480 365 2090 2350 813 940 488 20 560 397 433 446 470 478 355 2270 2260 901 853 492 22 553 392 415 428 468 468 477 338 1940 2010 926 728 452 429 489 386 420 439 446 470 478 355 2270 2260 901 853 492 22 553 392 415 428 468 468 477 338 1940 2010 926 728 452 429 489 386 420 439 449 446 488 477 338 1940 2010 926 728 452 429 489 386 420 439 449 446 488 477 338 1940 2010 926 728 452 429 430 455 483 384 1980 2270 718 1090 542 448 489 386 420 439 446 470 478 355 2270 2260 901 853 459 21 576 398 419 440 468 477 338 1940 2010 926 728 452 429 489 386 420 439 459 497 382 1770 1710 867 586 458 452 489 386 420 439 459 497 382 1770 1710 867 586 458 452 489 386 420 439 459 497 382 1770 1710 867 586 458 488 370 432 433 465 419 404 1250 1450 970 516 446 488 30 439 440 446 484 374 414 180 1800 792 576 489 26 485 385 435 444 455 470 478 355 2270 2260 901 853 448 30 477 372 447 477 372 447 477 479 479 479 479 479 479 479 479	4	400	442	397	449	428	460	348	955	1530	1040	900	485
7	5	418	437	412	485	436	470	341	898	1930	1180	951	
7		441	436	431	458	443	472	357	949	2270	1200	992	514
9 564 458 419 475 424 473 362 629 1740 759 1040 477 10 585 461 417 468 424 405 369 525 1660 704 932 469 11 740 437 416 466 422 355 351 525 1750 733 940 440 12 733 451 411 454 412 307 343 1060 2270 781 915 394 14 546 444 425 441 408 307 343 1060 2270 781 915 394 14 546 444 425 441 408 307 335 1280 2130 742 900 385 15 570 429 432 422 410 311 349 1600 1980 706 902 376 16 579 395 426 419 408 350 350 1890 2170 699 984 381 17 577 417 426 426 444 441 382 2030 1960 712 1160 403 18 600 415 422 430 455 483 384 1980 2270 718 1090 542 19 563 409 436 432 458 480 365 2090 2350 813 940 488 20 560 397 433 446 470 478 355 2270 2260 901 853 459 21 576 398 419 440 468 477 338 1940 2010 926 728 452 22 553 392 415 428 464 468 336 2220 1750 1020 671 447 23 544 392 410 430 465 462 334 1990 1760 977 642 442 42 489 386 420 439 459 497 382 1770 1710 867 586 458 25 480 384 418 439 446 468 376 2220 1750 1020 671 447 24 489 386 420 439 459 449 440 488 374 1990 1760 977 642 442 42 489 386 420 439 459 497 382 1770 1710 867 586 458 25 480 384 418 439 446 484 374 1400 1800 792 576 489 26 485 385 435 444 455 470 316 1260 1770 781 547 472 27 479 372 427 439 463 431 334 1120 1640 878 527 448 36 488 370 432 433 465 419 404 1250 1450 970 576 489 488 30 473 366 424 434 419 463 1700 1100 940 534 448 30 473 366 424 434 419 463 1700 1100 940 534 448 30 473 366 424 434 419 463 1700 1100 940 534 448 30 473 366 424 434 419 463 1700 1100 940 534 448 31 450 830 530 830 530 830 530 830 530 830 530 1200 1160 542 481 488 30 473 366 424 434 419 463 1700 1100 940 534 448 31 450 830 530 830 530 1200 1160 542 481 314 320 336 337 336 337 337 337 338 340 348 348 348 348 348 349 340 368 343 3465 349 348 348 348 380 823 460 348 33 465 349 348 330 473 366 424 434 419 463 1700 1100 940 534 488 30 473 366 424 434 419 463 1700 1100 940 534 488 30 473 366 424 434 419 463 1700 1100 940 534 488 30 473 366 424 434 419 463 1700 1100 940 534 488 30 473 366 424 434 419 463 1700 1100 940 5330 530	7	459	453					360	1070				
10	8	524	454	427	467	424	480	357	819	2040	974	1120	483
11 740 437 416 466 422 355 351 525 1750 733 940 440 12 773 451 411 454 412 307 343 778 2080 727 933 421 13 598 437 414 442 408 294 343 1060 2270 781 915 394 14 546 444 425 441 408 307 335 1280 2130 742 900 385 15 570 429 432 422 410 311 349 1600 1980 706 902 376 16 579 395 426 419 408 350 350 1890 2170 699 984 381 17 577 417 426 426 444 441 382 2030 1960 712 1160 403 18 600 415 422 430 455 483 384 1980 2270 718 1090 542 199 563 409 436 432 458 480 365 2090 2350 813 940 488 20 560 397 433 446 470 478 355 2270 2260 901 853 459 21 576 398 419 440 468 477 338 1940 2010 926 728 452 22 553 392 415 428 464 468 336 2220 1750 1020 671 447 23 544 489 386 420 439 459 497 382 1770 1710 867 586 458 24 449 386 420 439 459 497 382 1770 1710 867 586 458 24 440 384 374 1440 1800 792 576 489 386 420 439 459 497 382 1770 1710 867 586 458 26 485 385 435 444 455 470 316 1260 1770 781 547 472 27 477 372 427 439 463 431 334 1120 1640 878 527 448 28 488 370 368 428 433 431 418 1630 1180 987 525 488 30 473 366 424 434 455 470 478 1620 1770 781 547 472 27 477 372 427 439 463 431 334 1120 1640 878 527 448 28 488 370 433 446 485 431 334 1120 1640 878 527 448 28 488 370 433 446 484 374 1440 1800 792 576 489 386 420 439 459 497 382 1770 1710 867 586 458 25 480 384 418 439 446 484 374 1440 1800 792 576 489 386 420 439 459 497 382 1770 1710 867 586 458 25 480 384 418 439 446 484 374 1440 1800 792 576 489 386 420 439 459 497 382 1770 1710 867 586 458 26 485 385 435 444 455 470 316 1260 1770 781 547 472 27 477 372 427 439 463 431 334 1120 1640 878 527 448 30 473 366 424 434 419 463 1700 1100 940 534 448 31 450 420 442 410 1740 180 540 570 570 570 570 570 570 570 570 570 57	9	564	458	419	475	424	473	362	629	1740	759	1040	477
12 733 451 411 454 412 307 343 778 2080 727 933 421 13 598 437 414 442 408 294 343 1060 2270 781 915 394 345 15 570 429 432 422 410 311 349 1600 1980 706 902 376 16 579 395 426 419 408 350 350 1890 2170 699 984 381 17 577 417 426 426 444 441 382 2030 1960 712 1160 403 18 600 415 422 430 455 483 384 1980 2270 718 1090 542 19 563 409 436 432 458 480 365 2090 2350 813 940 488 20 560 397 433 446 470 478 355 2270 2260 901 853 459 21 576 398 419 440 468 477 338 1940 2010 926 728 452 22 553 392 415 428 464 468 477 338 1940 2010 926 728 452 22 553 392 410 430 465 462 334 1990 1760 977 642 442 24 489 386 420 439 459 497 382 1770 1710 867 586 458 25 480 384 418 439 446 484 374 1440 1800 792 576 489 26 485 385 435 444 455 470 316 1260 1770 781 586 458 26 485 385 435 444 455 470 316 1260 1770 781 587 586 458 26 485 385 435 444 455 470 316 1260 1770 781 547 472 27 477 372 427 439 463 431 334 1120 1640 878 527 448 30 477 372 427 439 463 431 334 1120 1640 878 527 448 30 477 372 427 439 463 431 334 1120 1640 878 527 448 30 477 372 427 439 463 431 334 1120 1640 878 527 448 30 477 372 427 439 463 431 334 1120 1640 878 527 448 30 477 372 427 439 463 431 334 1120 1640 878 527 448 30 477 372 427 439 463 431 334 1120 1640 878 527 448 30 473 366 424 434 434 419 463 1700 1100 940 534 448 30 473 366 424 434 434 419 463 1700 1100 940 534 448 31 450 420 442 410 463 1700 1100 940 534 448 31 450 420 442 410 463 1700 1100 940 534 448 31 450 420 442 410 463 1700 1100 940 534 448 31 450 420 442 410 463 1700 1100 940 534 448 31 450 420 442 410 463 1700 1100 940 534 448 31 450 420 442 410 463 1700 1100 940 534 448 31 450 420 442 410 463 1700 1100 940 534 448 31 450 420 442 410 463 1700 1100 940 534 448 31 450 420 442 410 463 1700 1100 940 534 448 31 450 420 442 410 463 1700 1100 940 534 343 360 360 424 434 434 419 463 1700 1100 940 534 343 360 360 424 343 433 431 418 1630 1180 987 525 488 310 370 370 370 370 370 370 370 370 370 37	10	585	461	417	468	424	405	369	525	1660	704	932	469
13	11	740	437	416	466	422	355	351	525	1750	733	940	440
14	12	733	451	411	454	412	307	343	778	2080	727	933	421
15	13	598	437	414	442	408	294	343	1060	2270	781	915	394
16         579         395         426         419         408         350         350         1890         2170         699         984         381           17         577         417         426         426         444         441         382         2030         1960         712         1160         403           18         600         415         422         430         455         483         384         1980         2270         718         1090         542           19         563         409         436         432         458         480         365         2090         2350         813         940         488           20         560         397         433         446         470         478         355         2270         2260         901         853         459           21         576         398         419         440         468         477         338         1940         2010         926         728         452           22         553         392         415         428         464         468         336         2220         1750         1020         671         447	14	546	444	425	441	408	307	335	1280	2130	742	900	385
17 577 417 426 426 444 441 382 2030 1960 712 1160 403 18 600 415 422 430 455 483 384 1980 2270 718 1090 542 19 563 409 436 432 458 480 365 2090 2350 813 940 488 20 560 397 433 446 470 478 355 2270 2260 901 853 459 21 576 398 419 440 468 477 338 1940 2010 926 728 452 22 553 392 415 428 464 468 336 2220 1750 1020 671 447 23 544 392 410 430 465 462 334 1990 1760 977 642 442 24 489 386 420 439 459 497 382 1770 1710 867 586 458 25 480 384 418 439 446 484 374 1440 1800 792 576 489 26 485 385 435 444 455 470 316 1260 1770 781 547 472 27 477 372 427 439 463 431 334 1120 1640 878 527 448 28 488 370 432 433 465 419 404 1250 1450 970 516 446 29 480 368 428 433 431 418 1630 1180 987 525 448 30 473 366 424 434 419 463 1700 1100 940 534 448 31 450 420 442 410 1740 830 530  TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791 MEAN 519 417 422 441 437 431 364 1341 1843 880 823 460 AC-FT 31890 24810 25920 27150 24300 26500 21670 82430 109700 54130 50610 27350 MMAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542 MIN 372 366 707A 123 408 MEAN 656 MAX 2690 MIN 278 AC-FT 474900	15	570	429	432	422	410	311	349	1600	1980	706	902	376
18         600         415         422         430         455         483         384         1980         2270         718         1090         542           19         563         409         436         432         458         480         365         2090         2350         813         940         488           20         560         397         433         446         470         478         355         2270         2260         901         853         459           21         576         398         419         440         468         477         338         1940         2010         926         728         452           22         553         392         415         428         464         468         336         2220         1750         1020         671         447           23         544         392         410         430         465         462         334         1990         1760         977         642         442           24         489         386         420         439         459         497         382         1770         1710         867         586         458	16	579	395	426	419	408	350	350	1890	2170	699	984	381
19 563 409 436 432 458 480 365 2090 2350 813 940 488 20 560 397 433 446 470 478 355 2270 2260 901 853 459 21 576 398 419 440 468 477 338 1940 2010 926 728 452 22 553 392 415 428 464 468 336 2220 1750 1020 671 447 23 544 392 410 430 465 462 334 1990 1760 977 642 442 24 489 386 420 439 459 497 382 1770 1710 867 586 458 25 480 384 418 439 446 484 374 1440 1880 792 576 489 26 485 385 435 444 455 470 316 1260 1770 781 547 472 27 477 372 427 439 463 431 334 1120 1640 878 527 448 28 488 370 432 433 465 419 404 1250 1450 970 516 446 29 480 368 428 433 431 418 1630 1180 987 525 448 30 473 366 424 434 419 463 1700 1100 940 534 448 31 450 420 442 410 1740 830 530   TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791 MEAN 519 417 422 441 437 431 364 1341 1843 880 823 460 MAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542 MIN 372 366 397 413 408 294 316 519 1100 699 516 376 CAL YR 2006 TOTAL 239409 MEAN 656 MAX 2690 MIN 278 AC-FT 474900	17	577	417	426	426	444	441	382	2030	1960	712	1160	403
20 560 397 433 446 470 478 355 2270 2260 901 853 459 21 576 398 419 440 468 477 338 1940 2010 926 728 452 22 553 392 415 428 464 468 336 2220 1750 1020 671 447 23 544 392 410 430 465 462 334 1990 1760 977 642 442 24 489 386 420 439 459 497 382 1770 1710 867 586 458 25 480 384 418 439 446 484 374 1440 1800 792 576 489 26 485 385 435 444 455 470 316 1260 1770 781 547 472 27 477 372 427 439 463 431 334 1120 1640 878 527 448 28 488 370 432 433 465 419 404 1250 1450 970 516 446 29 480 368 428 433 431 418 1630 1180 987 525 448 30 473 366 424 434 419 463 1700 1100 940 534 448 31 450 420 442 410 1740 830 530   TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791 MEAN 519 417 422 441 437 410 1740 830 530 TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791 MEAN 519 417 422 441 437 410 1740 830 530 TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791 MEAN 519 417 422 441 437 410 1740 830 530 TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791 MEAN 519 417 422 441 437 431 364 1341 1843 880 823 460 AC-FT 31890 24810 25920 27150 24300 26500 21670 82430 109700 54130 50610 27350 MAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542 MIN 372 366 397 413 408 294 316 519 1100 699 516 376	18	600	415	422	430	455	483	384	1980	2270	718	1090	542
21 576 398 419 440 468 477 338 1940 2010 926 728 452 22 553 392 415 428 464 468 336 2220 1750 1020 671 447 23 544 392 410 430 465 462 334 1990 1760 977 642 442 489 386 420 439 455 497 382 1770 1710 867 586 458 25 480 384 418 439 446 484 374 1440 1800 792 576 489 26 485 385 435 444 455 470 316 1260 1770 781 547 472 27 477 372 427 439 463 431 334 1120 1640 878 527 448 28 488 370 432 433 465 419 404 1250 1450 970 516 446 29 488 30 473 366 424 434 419 463 1700 1100 940 534 448 31 450 420 442 419 463 1700 1100 940 534 448 31 450 420 442 419 463 1700 1100 940 534 448 31 450 420 442 410 1740 830 530   TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791 MEAN 519 417 422 441 437 431 364 1341 1843 880 823 460 AC-FT 31890 24810 25920 27150 24300 26500 21670 82430 109700 54130 50610 27350 MAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542 MIN 372 366 397 413 408 294 316 519 1100 699 516 376		563	409	436	432	458	480	365					
22 553 392 415 428 464 468 336 2220 1750 1020 671 447 23 544 392 410 430 465 462 334 1990 1760 977 642 442 24 489 386 420 439 459 497 382 1770 1710 867 586 458 25 480 384 418 439 446 484 374 1440 1800 792 576 489 26 485 385 435 444 455 470 316 1260 1770 781 547 472 27 477 372 427 439 463 431 334 1120 1640 878 527 448 28 488 370 432 433 465 419 404 1250 1450 970 516 446 29 480 368 428 433 431 418 1630 1180 987 525 448 31 450 420 442 419 463 1700 1100 940 534 448 31 450 420 442 410 1740 830 530 TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791 MEAN 519 417 422 441 437 431 364 1341 1843 880 823 460 AC-FT 31890 24810 25920 27150 24300 26500 21670 82430 109700 54130 50610 27350 MAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542 MIN 372 366 397 413 408 294 316 519 1100 699 516 376													
23 544 392 410 430 465 462 334 1990 1760 977 642 442 24 489 386 420 439 459 497 382 1770 1710 867 586 458 25 480 384 418 439 446 484 374 1440 1800 792 576 489 26 485 385 435 444 455 470 316 1260 1770 781 547 472 27 477 372 427 439 463 431 334 1120 1640 878 527 448 28 488 370 432 433 465 419 404 1250 1450 970 516 446 29 480 368 428 433 431 418 1630 1180 987 525 448 30 473 366 424 434 419 463 1700 1100 940 534 448 31 450 420 442 410 1740 830 530   TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791 MEAN 519 417 422 441 437 431 364 1341 1843 880 823 460 AC-FT 31890 24810 25920 27150 24300 26500 21670 82430 109700 54130 50610 27350 MAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542 MIN 372 366 397 413 408 294 316 519 1100 699 516 376				419	440	468		338				728	452
24       489       386       420       439       459       497       382       1770       1710       867       586       458         25       480       384       418       439       446       484       374       1440       1800       792       576       489         26       485       385       435       444       455       470       316       1260       1770       781       547       472         27       477       372       427       439       463       431       334       1120       1640       878       527       448         28       488       370       432       433       465       419       404       1250       1450       970       516       446         29       480       368       428       433        431       418       1630       1180       987       525       448         30       473       366       424       434        419       463       1700       1100       940       534       448         31       450        420       442        419       463		553		415	428	464	468	336		1750		671	447
25				410	430								
26 485 385 435 444 455 470 316 1260 1770 781 547 472 27 477 372 427 439 463 431 334 1120 1640 878 527 448 28 488 370 432 433 465 419 404 1250 1450 970 516 446 29 480 368 428 433 431 418 1630 1180 987 525 448 30 473 366 424 434 419 463 1700 1100 940 534 448 31 450 420 442 410 1740 830 530 TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791 MEAN 519 417 422 441 437 431 364 1341 1843 880 823 460 AC-FT 31890 24810 25920 27150 24300 26500 21670 82430 109700 54130 50610 27350 MAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542 MIN 372 366 397 413 408 294 316 519 1100 699 516 376													
27 477 372 427 439 463 431 334 1120 1640 878 527 448 28 488 370 432 433 465 419 404 1250 1450 970 516 446 29 480 368 428 433 431 418 1630 1180 987 525 448 30 473 366 424 434 419 463 1700 1100 940 534 448 31 450 420 442 410 1740 830 530   TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791 MEAN 519 417 422 441 437 431 364 1341 1843 880 823 460 AC-FT 31890 24810 25920 27150 24300 26500 21670 82430 109700 54130 50610 27350 MAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542 MIN 372 366 397 413 408 294 316 519 1100 699 516 376													
28													
29       480       368       428       433        431       418       1630       1180       987       525       448         30       473       366       424       434        419       463       1700       1100       940       534       448         31       450        420       442        410        1740        830       530          TOTAL       16077       12509       13069       13686       12249       13358       10923       41566       55290       27291       25518       13791         MEAN       519       417       422       441       437       431       364       1341       1843       880       823       460         AC-FT       31890       24810       25920       27150       24300       26500       21670       82430       109700       54130       50610       27350         MAX       740       461       436       485       470       497       463       2270       2350       1200       1160       542         MIN       372       366       397       413													
30 473 366 424 434 419 463 1700 1100 940 534 448 31 450 420 442 410 1740 830 530   TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791  MEAN 519 417 422 441 437 431 364 1341 1843 880 823 460  AC-FT 31890 24810 25920 27150 24300 26500 21670 82430 109700 54130 50610 27350  MAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542  MIN 372 366 397 413 408 294 316 519 1100 699 516 376   CAL YR 2006 TOTAL 239409 MEAN 656 MAX 2690 MIN 278 AC-FT 474900						465							
31 450 420 442 410 1740 830 530  TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791  MEAN 519 417 422 441 437 431 364 1341 1843 880 823 460  AC-FT 31890 24810 25920 27150 24300 26500 21670 82430 109700 54130 50610 27350  MAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542  MIN 372 366 397 413 408 294 316 519 1100 699 516 376  CAL YR 2006 TOTAL 239409 MEAN 656 MAX 2690 MIN 278 AC-FT 474900													
TOTAL 16077 12509 13069 13686 12249 13358 10923 41556 55290 27291 25518 13791 MEAN 519 417 422 441 437 431 364 1341 1843 880 823 460 AC-FT 31890 24810 25920 27150 24300 26500 21670 82430 109700 54130 50610 27350 MAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542 MIN 372 366 397 413 408 294 316 519 1100 699 516 376 CAL YR 2006 TOTAL 239409 MEAN 656 MAX 2690 MIN 278 AC-FT 474900			366					463					448
MEAN         519         417         422         441         437         431         364         1341         1843         880         823         460           AC-FT         31890         24810         25920         27150         24300         26500         21670         82430         109700         54130         50610         27350           MAX         740         461         436         485         470         497         463         2270         2350         1200         1160         542           MIN         372         366         397         413         408         294         316         519         1100         699         516         376	31	450		420	442		410		1740		830	530	
AC-FT 31890 24810 25920 27150 24300 26500 21670 82430 109700 54130 50610 27350 MAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542 MIN 372 366 397 413 408 294 316 519 1100 699 516 376 CAL YR 2006 TOTAL 239409 MEAN 656 MAX 2690 MIN 278 AC-FT 474900	TOTAL												
MAX 740 461 436 485 470 497 463 2270 2350 1200 1160 542 MIN 372 366 397 413 408 294 316 519 1100 699 516 376 CAL YR 2006 TOTAL 239409 MEAN 656 MAX 2690 MIN 278 AC-FT 474900	MEAN	519	417	422	441	437	431	364	1341	1843	880	823	460
MIN 372 366 397 413 408 294 316 519 1100 699 516 376 CAL YR 2006 TOTAL 239409 MEAN 656 MAX 2690 MIN 278 AC-FT 474900	AC-FT	31890	24810	25920	27150	24300	26500	21670		109700	54130	50610	27350
CAL YR 2006 TOTAL 239409 MEAN 656 MAX 2690 MIN 278 AC-FT 474900	MAX	740	461	436	485	470	497	463	2270	2350	1200	1160	542
	MIN	372	366	397	413	408	294	316	519	1100	699	516	376

MTR YR 2007 TOTAL 255317 MEAN 699 MAX 2350 MIN 294 AC-FT 506400

MAX DISCH: 2570 CFS AT 01:00 ON Jun. 7, 2007 GH 6.26 FT. GH CORR. -0.01 FT. SHIFT +0.03 FT. MAX GH: 6.25 FT. (GH CORR. -0.01 FT. APPLIED) AT 01:00 ON Jun. 7, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 07093700 ARKANSAS RIVER NEAR WELLSVILLE CO WY2007 HYDROGRAPH



(THIS PAGE INTENTIONALLY LEFT BLANK)

#### 07095000 GRAPE CREEK NEAR WESTCLIFFE, CO

LOCATION.--Lat 38°11'10", long 105°28'59", in NW4NW4 sec. 31, T.21 S., R.72 W., Custer County, Hydrologic Unit 110200001, on left bank 0.5 mi upstream from water line of De Weese Reservoir at elevation 7,665 ft, 0.5 mi downstream from Swift Creek, and 3.6 mi northwest of Westcliffe.

DRAINAGE AREA. -- 320 mi<sup>2</sup>.

GAGE. --Graphic water stage recorder, satellite monitored data collection platform (Sutron Model 8210 DCP) and shaft encoder in a 48-inch diameter metal pipe (CMP) shelter and well. Primary record is DCP log data with the graphic chart recorder and satellite data used for backup purposes. Primary reference gage is electric drop tape inside well. No outside staff gage. An air temperature sensor, installed in radiation shield, and a tipping bucket raingage are also installed at the gage and monitored by the DCP. The partially completed bank operated cableway was dismantled and removed from the site on September 11, 2007. The control is a compound, broad-crested weir located 17 ft. downstream from the gage. Elevation of gage is 7,690 ft, from topographic map. Prior to Mar, 17. 1939, at site 30 ft upstream at present datum.

REMARKS.--Record is complete and reliable, except for the following periods: November 11, 14-20, 27-30; December 1-3, 6-12, 18-20, 2006; and March 8-10, 2007, when the stage-discharge relationship was affected by shore ice and ice on the control; and December 4-5, 13-17, 21-31, 2006; January 1-31; February 1-28; and March 1-7, 2007, when the chart and shaft encoder floats were frozen in ice in the well, the well was frozen, intakes were frozen, and the control/weir pool was frozen. Record good, except for periods of ice effect and no gage height record, which are poor. Station maintained and record developed by T.W. Ley.

RATING TABLE. -- GRAWESCO09 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE,	IN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007	
			1	MEAN V	VALUES					

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	29	19	19	12	18	30	59	131	79	61	31
2	16	26	18	19	12	18	25	63	138	66	95	27
3	16	28	18	20	13	18	22	59	166	58	86	23
4	15	28	17	22	14	19	20	55	225	49	75	21
5	14	27	17	24	16	23	20	54	198	86	91	24
6	15	27	18	23	18	29	21	44	189	74	147	22
7	17	28	17	22	19	35	21	93	146	62	114	19
8	28	28	18	24	19	60	23	228	115	54	129	20
9	48	27	18	26	21	80	23	107	81	43	96	19
10	55	26	19	25	22	110	22	61	82	41	79	20
11	67	23	18	27	24	154	19	49	103	119	69	19
12	50	25	18	25	26	162	21	51	120	77	62	15
13	38	25	19	23	26	160	23	69	260	62	54	15
14	34	25	21	20	24	136	26	103	214	52	49	13
15	45	24	22	17	22	108	55	148	161	46	43	12
16	40	24	22	15	21	76	87	153	146	43	45	11
17	36	25	21	14	21	61	88	133	167	42	49	12
18	36	24	21	14	23	51	51	124	170	42	38	14
19	32	24	18	13	25	46	30	113	140	64	36	13
20	33	23	15	13	26	42	25	123	117	170	32	12
21	30	24	15	13	27	38	22	156	109	131	27	12
22	28	24	15	13	26	37	21	164	109	107	25	11
23	27	24	15	13	25	35	18	183	104	77	23	11
24	27	23	14	14	23	48	25	326	87	65	24	11
25	27	24	15	15	22	55	38	262	78	58	22	11
26	27	24	17	15	21	37	104	190	68	56	20	10
27	28	22	19	14	20	32	227	133	131	55	18	10
28	36	22	21	14	20	27	220	118	148	60	20	11
29	39	21	21	13		24	66	133	106	68	20	12
30	36	20	20	13		27	55	153	108	73	22	11
31	32		19	13		33		149		69	20	
TOTAL	987	744	565	555	588	1799	1448	3856	4117	2148	1691	472
MEAN	31.8	24.8	18.2	17.9	21.0	58.0	48.3	124	137	69.3	54.5	15.7
AC-FT	1960	1480	1120	1100	1170	3570	2870	7650	8170	4260	3350	936
MAX	67	29	22	27	27	162	227	326	260	170	147	31
MIN	14	20	14	13	12	18	18	44	68	41	18	10
CAL YR	2006	TOTAL	7649.8	MEAN	21 MAX	9	94 MIN	3.1	AC-FT	15170		

MAX DISCH: 452 CFS AT 00:15 ON Apr. 28, 2007 GH 2.59 FT. SHIFT 0.05 FT. MAX GH: 2.59 FT. AT 00:15 ON Apr. 28, 2007

52 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

18970 MEAN

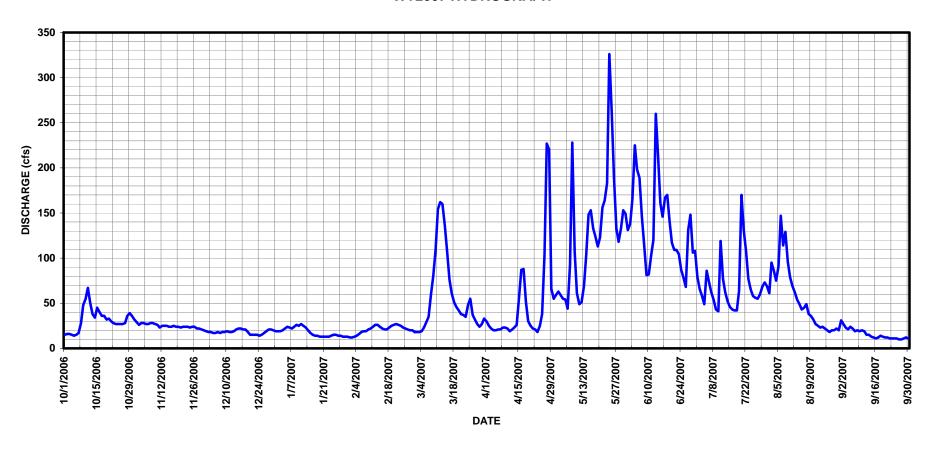
TOTAL

WTR YR 2007

326 MIN

10 AC-FT 37630

# 07095000 GRAPE CREEK NEAR WESTCLIFFE CO WY2007 HYDROGRAPH



#### 07096000 ARKANSAS RIVER AT CANON CITY, CO

LOCATION.--Lat 38°26'02", long 105°15'24", in SE4SE4 sec. 31, T.18 S., R.70 W., Fremont County, Hydrologic Unit 11020002, on right bank 800 ft upstream from Sand Creek, 0.7 mi downstream from Grape Creek, and 0.7 mi upstream from First Street Bridge in Canon City.

DRAINAGE AREA AND PERIOD OF RECORD.--3,117 mi<sup>2</sup>. January 1888 to current year. Monthly data only for some periods. Published as near Canyon 1900-1906.

GAGE.--Graphic water-stage recorder, with high data rate DCP (Sutron 8210) and SDI shaft encoder in 42-inch diameter CMP shelter and well. Primary reference gage is electric drop tape inside well. Control is man-made concrete diversion dam located approximately 200 feet downstream. Cableway 15-20 feet downstream from gage. USGS Hydrolab is co-located at gage. Datum of gage is 5,342.13 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record is complete and reliable, except for the following days when ice affected the gage height: Nov. 30; Dec. 1-10, 22-26, 2006; Jan. 1-2, 6-7, 13-31, Feb. 1-10, Mar. 2-5, 2007. Record good, except for days on which ice affected the stage-discharge relationship. Record during this period should be considered poor. Station maintained and record developed by M. A. Perry.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

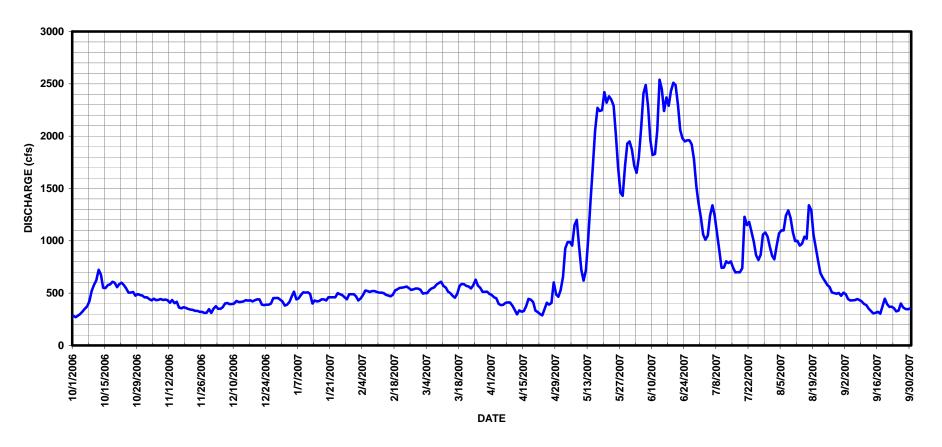
RATING TABLE. -- ARKCANCO23 USED FROM 01-OCT-2006 TO 30-SEP-2007

DAY				2100111		ME	CAN VALUE	ES	10 02111				
2 270 461 375 390 430 495 461 654 1720 1060 822 489 3 284 443 350 416 450 500 451 926 1650 1010 957 443 4 299 431 350 468 480 500 397 988 1800 1050 1070 430 5 324 446 365 514 525 530 385 989 2070 1240 1100 431 6 350 432 400 440 520 546 388 954 2410 1340 1100 431 7 373 436 405 450 510 555 407 1150 2490 1240 1240 432 7 373 436 405 450 510 555 407 1150 2490 1240 1240 432 8 423 443 395 483 520 581 411 1200 2280 1880 1290 435 9 520 435 396 507 520 596 410 939 1960 907 1220 420 10 579 439 400 505 510 608 380 724 1820 741 1080 396 11 622 432 425 507 504 569 342 619 1830 745 997 385 12 723 409 415 493 505 554 296 722 2050 804 1000 350 13 676 434 416 400 500 514 335 1020 2240 788 954 14 550 403 420 430 483 500 322 1390 2450 803 972 306 15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 19 600 358 432 430 557 589 415 2250 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 19 600 358 432 430 557 589 415 2250 2250 701 1340 305 18 609 366 421 440 556 569 438 2240 2430 699 1290 374 19 600 358 432 430 557 589 415 2250 2510 738 1060 447 20 557 349 411 460 550 584 334 2240 2430 699 1290 374 19 600 358 432 430 557 589 415 2250 2510 738 1060 447 20 557 349 414 460 552 569 320 2320 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 556 564 329 2380 2060 1180 692 370 23 577 331 385 460 556 551 408 201 1950 991 615 326 25 504 321 390 490 531 629 408 201 1950 991 615 326 25 504 321 390 490 531 629 408 201 1950 991 615 326 25 504 321 390 490 531 629 408 201 1950 991 615 326 25 504 321 390 490 531 629 408 201 1950 991 615 326 25 504 321 390 490 531 629 408 201 1950 991 615 326 25 504 321 390 490 531 629 408 201 1950 991 615 326 25 504 321 390 490 531 629 408 201 1950 991 615 326 26 504 321 390 490 531 629 408 201 1950 991 615 326 28 475 312 453 440 543 545 550 3380 2340 9380 2300 1350 1000 500 500 348 30 481 310 4	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
3 284 443 350 416 450 500 451 926 1650 1010 957 443 443 429 431 350 468 480 500 397 988 1800 1050 1070 430 55 324 446 365 514 525 530 385 989 2070 1240 1100 431 6 350 432 400 440 520 546 388 954 2410 1340 1100 432 7 373 436 405 450 510 555 407 1150 2490 1240 1240 444 8 423 443 395 483 520 581 411 1200 2280 1080 1290 435 9 520 435 396 507 520 596 410 939 1960 907 1220 420 10 579 439 400 505 510 608 380 724 1820 741 1080 396 11 622 432 425 507 504 569 342 619 1830 745 997 385 12 723 409 415 493 505 554 296 722 2050 804 1000 350 13 676 434 416 400 500 514 335 1020 2540 788 954 329 14 550 403 420 430 483 500 322 1390 2450 803 972 306 15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 435 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 460 550 584 382 2240 2430 699 1290 374 19 600 358 432 430 537 589 418 2240 2470 2490 1230 930 394 21 586 343 440 460 550 584 334 2240 2470 2490 1230 930 394 21 586 343 440 460 556 569 438 2240 2430 699 1290 374 19 600 358 432 430 537 589 418 2250 2250 2310 699 1290 374 19 600 358 432 430 537 589 418 2220 2490 1230 930 394 21 586 343 440 460 552 569 320 2320 2300 1150 807 369 22 550 504 321 390 490 551 565 563 299 2380 2060 1180 807 369 22 550 504 321 390 490 551 565 563 299 2380 2060 1180 807 369 22 550 504 321 390 490 551 565 563 299 2380 2060 1180 607 357 24 546 331 390 500 548 575 349 2490 1230 930 394 21 586 343 440 480 552 569 320 2320 2300 1150 807 369 22 550 43 321 390 490 551 565 563 299 2380 2060 1180 697 357 357 351 360 697 474 474 380 480 575 380 480 570 570 570 570 570 570 570 570 570 57	1	281	458	350	380	470	532	482	527	1870	1220	855	505
4 299 431 350 468 480 500 397 988 1800 1050 1070 430 5 324 446 365 514 525 530 385 989 2070 1240 1100 431 6 350 432 400 440 520 546 388 954 2410 1340 1100 431 7 373 436 405 450 510 555 407 1150 2490 1240 1240 1240 444 8 423 443 395 483 520 581 411 1200 2280 1080 1290 435 9 520 435 396 507 520 596 410 939 1960 907 1220 420 10 579 439 400 505 510 608 380 724 1820 741 1080 396 11 622 432 425 507 504 569 342 619 1830 745 997 385 12 723 409 415 493 505 554 296 722 2050 804 1000 350 13 676 434 416 400 500 514 335 1020 2540 788 954 329 14 550 403 420 430 483 500 322 1390 2450 803 972 306 15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2250 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 20 557 349 441 460 550 584 3496 445 2270 2250 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 20 557 349 441 460 550 584 3496 445 2270 2250 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 20 557 349 441 460 550 584 349 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 20 557 349 441 460 550 584 334 2420 2490 1230 930 394 21 586 343 440 460 552 569 320 2320 2300 1150 807 369 22 600 339 390 460 556 569 330 2390 2300 1150 807 369 22 600 339 390 460 556 563 549 2380 2060 1180 692 370 235 577 331 385 460 563 544 287 2350 1980 1090 647 575 24 546 331 390 500 548 575 349 2290 1950 991 615 326 28 475 312 453 440 480 575 551 406 1460 1920 867 506 362 28 475 312 453 440 480 575 551 406 1460 1920 867 506 333 31 477 420 490 512 488 1720 1520 1980 1990 494 346 AC-FT 3075L 15501 11576 1261 14218 14345 16780 11817 4728 2600 2991 2708 11512 MAN 703 461 454 514 563 629 602 2420 2540 1340 1340 505 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MAX 723 461 454 514 563 629 602 2420 2540 1340 1	2	270	461	375	390	430	495	461	654	1720	1060		489
5 324 446 365 514 525 530 385 989 2070 1240 1100 431 6 350 432 400 440 520 546 388 954 2410 1340 1100 432 7 373 436 405 450 510 555 407 1150 2490 1240 1240 444 8 423 443 395 483 520 581 411 1200 2280 1080 1290 435 9 520 435 396 507 520 596 410 939 1960 907 1220 420 10 579 439 400 505 510 608 380 724 1820 741 1080 396 11 622 432 425 507 504 569 342 619 1830 745 997 385 12 723 409 415 493 505 554 296 722 2050 804 1000 350 13 676 434 416 400 500 514 335 1020 2540 788 954 329 14 550 403 420 430 483 500 322 1390 2450 803 972 306 15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 550 569 438 2240 2430 699 1290 375 18 609 366 421 440 550 569 438 2240 2430 699 1290 375 18 609 358 432 430 557 589 415 2250 2510 738 1060 447 20 557 349 441 440 460 550 584 349 2240 2430 699 1290 375 18 609 358 432 430 557 589 415 2250 2510 738 1060 447 20 557 349 441 440 560 550 584 334 2240 2430 699 1290 375 18 609 358 432 430 537 589 415 2250 2510 738 1060 447 20 557 349 441 440 560 550 584 334 2420 2430 699 1290 375 24 586 343 440 460 550 584 334 2420 2430 699 1290 375 24 586 343 440 460 550 584 334 2420 2430 699 1290 375 24 586 343 440 460 550 584 334 2420 2430 699 1290 375 24 586 331 390 500 548 575 349 2290 1950 991 615 326 25 504 321 400 480 557 589 320 2320 2300 1150 807 359 24 546 331 390 500 548 575 349 2290 1950 991 615 326 25 504 321 400 480 537 572 390 1700 1960 864 576 333 31 2457 420 490 512 488 1720 1520 1080 494 346 25 476 311 453 440 543 440 543 575 440 545 1930 1700 1960 864 576 333 31 477 420 490 512 488 1720 1520 1080 494 346 AC-FT 30750 22960 25110 28200 28450 33280 2340 93780 123100 5930 5496 22830 MAX 723 461 454 514 563 629 602 2440 2540 1340 1340 1340 505 MAX 723 461 454 514 563 629 602 2440 2540 1340 1340 1340 505 MAX 723 461 454 514 564 514 565 626 602 2420 2540 1340 1340 1340 505 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 1340 505 MAX 723 461 454 514 563	3	284	443	350	416	450	500	451	926	1650	1010	957	443
6 350 432 400 440 520 546 388 954 2410 1340 1100 432 7 373 436 405 455 510 555 407 1150 2490 1240 1240 444 8 423 443 395 483 520 581 411 1200 2280 1080 1290 435 9 520 435 396 507 520 596 410 939 1960 907 1220 420 10 579 439 400 505 510 608 380 724 1820 741 1080 396 11 622 432 425 507 504 569 342 619 1830 745 997 385 12 723 409 415 493 505 554 296 722 2050 804 1000 350 13 676 434 416 400 500 514 335 1020 2540 788 954 329 14 550 403 420 430 483 500 322 1330 2450 803 972 306 15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 20 557 349 441 460 550 584 334 966 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 20 557 349 441 460 550 584 334 2240 2490 1230 930 394 21 586 343 440 460 550 584 334 2240 2490 1230 930 394 21 586 343 440 460 555 569 438 2240 2430 699 1290 374 20 557 349 441 460 550 584 334 2220 2490 1230 930 394 21 586 343 440 460 555 569 438 2220 2490 1230 930 394 21 586 343 440 460 555 569 382 2320 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 563 544 287 2350 1980 1090 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 25 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 867 506 362 28 475 312 453 440 490 512 488 1720 1520 1080 494 346 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 30 512 488 1720 1520 1080 494 346 30 481 310 438 490 30 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 93													
7 373 436 405 450 510 555 407 1150 2490 1240 1240 444 8 423 443 395 483 520 581 411 1200 2280 1080 1290 435 9 520 435 396 507 520 596 410 939 1960 907 1220 420 10 579 439 400 505 510 608 380 724 1820 741 1080 396 11 622 432 425 507 504 569 342 619 1830 745 997 385 12 723 409 415 493 505 554 296 722 2050 804 1000 350 13 676 434 416 400 505 510 500 514 335 1020 2540 788 954 329 14 550 403 420 430 483 500 322 1330 2450 803 972 306 15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 19 600 358 432 430 537 589 415 2250 2510 738 1060 447 20 557 349 441 460 550 584 334 220 220 2200 1150 807 369 1290 374 19 600 358 432 430 537 589 415 2250 2510 738 1060 447 20 557 349 441 460 550 584 332 220 2200 1150 807 369 22 600 339 390 460 556 563 299 2300 2300 1150 807 369 22 600 339 390 460 556 563 299 2300 2300 1150 807 369 22 600 339 390 460 556 563 299 2300 2300 1150 807 369 23 70 22 500 330 390 460 556 563 299 2300 2300 1150 807 369 22 6504 321 400 480 537 572 390 1980 1090 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 504 321 400 480 537 572 390 1980 1090 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 504 321 400 480 537 572 390 1900 1960 817 558 400 27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1700 1960 817 558 400 27 511 311 453 440 543 512 602 1430 1700 1960 817 558 400 30 31 477 420 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474 937 474 937 474 930 130 350 380 430 450 545 551 400 5780 1250 59330 54960 22830 888 888 888 888 888 888 888 888 888				365	514							1100	
8 423 443 395 483 520 581 411 1200 2280 1080 1290 435 9 520 435 396 507 520 596 410 939 1960 907 1220 420 10 579 439 400 505 510 608 380 724 1820 741 1080 396 11 622 432 425 507 504 569 342 619 1830 745 997 385 12 723 409 415 493 505 554 296 722 2050 804 1000 350 13 676 434 416 400 500 514 335 1020 2540 788 954 329 14 550 403 420 430 483 550 322 1390 2450 803 972 306 15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 19 600 358 432 430 537 589 415 2250 2510 738 1060 447 20 557 349 441 460 550 584 334 2420 2490 1230 930 394 21 586 343 440 460 552 569 320 2320 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 697 370 23 577 331 385 460 563 544 287 279 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 697 370 23 577 331 385 460 563 544 287 279 290 190 647 357 24 546 331 390 590 500 548 575 349 2290 190 647 357 24 546 331 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 27 511 311 453 460 545 551 569 320 250 1500 490 502 353 31 477 420 490 513 465 1930 1360 1040 502 353 31 477 420 490 513 465 1930 1360 1940 502 353 31 477 420 490 513 465 629 602 2420 2540 1340 1340 1340 505													
9 520 435 396 507 520 596 410 939 1960 907 1220 420 10 579 439 400 505 510 608 380 724 1820 741 1080 396 11 622 432 425 507 504 569 342 619 1830 745 997 385 12 723 409 415 493 505 554 296 722 2050 804 1000 350 13 676 434 416 400 500 514 335 1020 2540 788 954 329 14 550 403 420 430 483 500 322 1390 2450 803 972 306 15 549 418 433 420 447 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 19 600 358 432 430 537 589 415 2250 2510 738 1060 447 20 557 349 441 460 550 584 334 2420 2490 1230 930 394 21 586 343 440 460 550 584 334 2240 2490 1230 930 394 21 586 343 440 460 550 584 334 2240 2490 1230 930 394 21 586 343 440 460 550 584 334 2200 2300 1150 807 369 22 600 339 390 460 556 569 320 2320 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 563 594 287 287 2880 290 1950 991 615 326 25 504 321 400 480 537 575 349 2290 1950 991 615 326 25 504 321 400 480 537 575 349 2290 1950 991 615 326 25 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 867 506 363 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 593 54960 22830 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 333 340 477 420 490 492 1950 937 474 937 474													
10 579 439 400 505 510 608 380 724 1820 741 1080 396 11 622 432 425 507 504 569 342 619 1830 745 997 385 12 723 409 415 493 505 554 296 722 2050 804 1000 350 13 676 434 416 400 500 514 335 1020 2540 788 954 329 14 550 403 420 430 483 500 322 1390 2450 803 972 306 15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 19 600 358 432 430 537 589 415 2250 2510 738 1060 447 20 557 349 441 460 550 584 334 2220 2490 1230 930 394 21 586 343 440 460 552 569 320 2320 2300 1150 807 369 22 600 339 330 460 556 563 544 287 2350 1980 1090 647 357 24 546 331 390 440 556 563 544 287 2350 1980 1090 647 357 24 546 331 390 440 556 563 544 287 2350 1980 1090 647 357 24 546 331 390 440 556 563 544 287 2350 1980 1090 647 357 24 546 331 390 440 556 563 544 287 2350 1980 1090 647 357 24 546 331 390 440 556 563 544 287 2350 1980 1090 647 357 24 546 331 390 440 556 563 544 287 2350 1980 1090 647 357 24 546 331 390 440 556 563 544 287 2350 1980 1090 647 357 24 546 331 390 440 556 563 544 287 2350 1980 1090 647 357 24 546 331 390 440 551 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 36 481 310 438 490 512 488 1720 1520 1080 494 346 36 30 481 310 438 490 512 488 1720 1520 1080 494 346 36 30 481 310 438 490 512 488 1720 1520 1080 593 5496 22830 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 331 477 420 490 492 1950 937 474 420 490 492 1950 937 474 937 474 420 490 492 1950 937 474 937 474 420 490 492 1950 937 474 937 474 420 490 492 1950 937 474 937 474 938 440 450 450													
11 622 432 425 507 504 569 342 619 1830 745 997 385 12 723 409 415 493 505 554 296 722 2050 804 1000 350 13 676 434 416 400 500 514 335 1020 2540 788 954 329 14 550 403 420 430 483 500 322 1390 2450 803 972 306 15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 19 600 358 432 430 537 589 415 2250 2510 738 1060 447 20 557 349 441 460 555 584 334 2420 2490 1230 930 394 15 586 343 440 460 555 569 320 2320 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 563 544 287 277 2350 1980 1090 647 357 24 546 331 390 500 548 575 349 229 1950 991 615 326 25 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 400 480 537 57 349 409 1531 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 540 545 551 406 1460 1920 867 506 362 28 475 312 453 440 540 545 551 406 1460 1920 867 506 362 28 475 312 453 440 540 545 551 406 1460 1920 867 506 362 28 475 312 453 440 540 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474 420 490 492 1950 937 474 420 490 420 490 420 240 240 2540 1340 1340 505 894 384 800 800 800 800 800 800 800 800 800 8													
12 723 409 415 493 505 554 296 722 2050 804 1000 350 13 676 434 416 400 500 514 335 1020 2540 788 954 329 14 550 403 420 430 483 500 322 1390 2450 803 972 306 15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 19 600 358 432 430 537 589 415 2250 2510 738 1060 447 20 557 349 441 460 550 584 334 2420 2490 1230 930 394 21 586 343 440 460 550 584 334 2420 2490 1230 930 394 21 586 343 440 460 555 569 320 2320 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 563 544 287 2350 1980 1090 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 504 321 390 490 531 629 408 2010 1960 864 576 332 26 504 321 390 490 531 629 408 2010 1960 867 558 400 27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1780 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 362 347 420 490 512 488 1720 1520 1080 494 346 362 347 420 490 512 488 1720 1520 1080 494 346 362 347 420 490 512 488 1720 1520 1080 494 346 363 31 370 500 548 575 349 2490 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 362 34 400 480 545 551 406 1460 1920 867 506 362 38 475 312 453 440 543 512 602 1430 1780 1060 500 348 31 477 420 490 512 488 1720 1520 1080 494 346 363 31 477 420 490 512 488 1720 1520 1080 494 346 363 31 477 420 490 512 488 1720 1520 1080 494 346 363 31 477 420 490 512 488 1720 1520 1080 494 346 363 31 477 420 490 512 488 1720 1520 1080 494 346 363 31 477 420 490 512 488 1720 1520 1080 494 346 363 31 477 420 490 512 488 1720 1520 1080 494 346 363 31 477 420 490 512 488 1720 1520 1080 494 346 365 310 400 505 310 300 300 300 300 300 300 300 300 300													
13 676 434 416 400 500 514 335 1020 2540 788 954 329 14 550 403 420 430 483 500 322 1390 2450 803 972 3366 15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 19 600 358 432 430 557 589 415 2250 2510 738 1060 447 20 557 349 441 460 550 584 334 2420 2490 2490 1230 930 394 21 586 343 440 460 555 584 334 2420 2490 1230 930 394 21 586 343 440 460 555 584 334 2420 2490 1230 930 394 21 586 343 440 460 555 569 320 2320 2300 1150 807 369 22 600 339 3390 460 556 563 299 2380 2060 1180 692 370 24 546 331 3390 500 556 563 544 287 2350 1980 1090 647 357 24 546 331 3390 500 548 575 349 2290 1950 991 615 326 504 321 400 480 537 572 390 1700 1960 817 558 400 27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 453 440 543 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 512 488 1720 1520 1800 494 346 30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474 937 474 420 490 492 1950 937 474 937 474 420 490 492 1950 937 474 937 474 420 490 492 1950 937 474 937 474 420 490 492 1950 937 474 937 474 937 474 937 474 937 474 937 474 937 474 937 474													
14 550 403 420 430 483 500 322 1390 2450 803 972 306 15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 20 557 349 441 460 556 569 438 2240 2430 699 1290 374 20 557 349 441 460 550 584 334 2420 2490 1230 930 394 21 586 343 440 460 552 569 320 2320 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 563 544 287 2350 1980 1990 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 25 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 364 377 420 490 512 488 1720 1520 1080 494 346 364 377 420 490 512 488 1720 1520 1080 494 346 364 377 420 490 512 488 1720 1520 1080 494 346 364 377 420 490 512 488 1720 1520 1080 494 346 364 377 420 490 512 488 1720 1520 1080 494 346 364 377 420 490 512 488 1720 1520 1080 494 346 346 346 346 348 459 348 348 340 340 340 340 340 340 340 340 340 340													
15 549 418 433 420 477 474 329 1710 2240 743 1040 312 16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 19 600 358 432 430 537 589 415 2250 2510 738 1060 447 20 557 349 441 460 550 584 334 2420 2490 1230 930 394 21 586 343 440 460 552 569 320 2320 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 556 544 287 2350 1980 1090 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 25 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 817 558 400 27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 30 513 465 1930 1360 1040 502 333 31 477 420 490 492 1950 937 474 937 474													
16 576 363 428 425 470 456 375 2050 2370 697 1020 321 17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 19 600 358 432 430 537 589 415 2250 2510 738 1060 447 20 557 349 441 460 550 584 334 2420 2490 1230 930 394 21 586 343 440 460 552 569 320 2320 2300 1150 807 369 22 600 339 390 460 552 569 320 2320 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 563 544 287 2350 1980 1090 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 25 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 817 558 400 27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 513 465 1930 1360 1040 502 353 31 477 420 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474 TOTAL 15501 11576 12661 14218 14345 16780 11817 47282 62060 29912 27708 11512 MEAN 500 386 408 459 512 541 394 1525 2069 965 894 384 AC-FT 30750 22960 25110 28200 28450 33280 23440 93780 123100 59330 54960 22830 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MIN 270 310 350 380 430 436 628 7550 MIN 192 AC-FT 438100													
17 584 354 431 440 483 496 445 2270 2290 701 1340 305 18 609 366 421 440 526 569 438 2240 2430 699 1290 374 19 600 358 432 430 537 589 415 2250 2510 738 1060 447 20 557 349 441 460 550 584 334 2420 2490 1230 930 394 21 586 343 440 460 552 569 320 2320 2300 1150 807 369 22 6000 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 563 544 287 2350 1980 1090 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 25 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 864 576 333 364 31 370 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 481 720 1520 1080 494 346 30 481 310 438 490 512 481 720 1520 1080 494 346 30 481 310 438 490 512 481 720 1520 1080 494 346 30 481 310 438 490 512 481 720 1520 1080 494 346 30 481 310 438 490 512 481 720 1520 1080 5930 5949 384 384 384 384 384 384 384 384 384 384													
18       609       366       421       440       526       569       438       2240       2430       699       1290       374         19       600       358       432       430       537       589       415       2250       2510       738       1060       447         20       557       349       441       460       550       584       334       2420       2490       1230       930       394         21       586       343       440       460       552       569       320       2320       2300       1150       807       369         22       600       339       390       460       556       563       299       2380       2060       1180       692       370         23       577       331       385       460       563       544       287       2350       1980       1090       647       357         24       546       331       390       500       548       575       349       2290       1950       991       615       326         25       504       321       390       490       531       629       408													
19 600 358 432 430 537 589 415 2250 2510 738 1060 447 20 557 349 441 460 550 584 334 2420 2490 1230 930 394 21 586 343 440 460 552 569 320 2320 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 563 544 287 2350 1980 1090 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 25 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 340 480 537 572 390 1700 1960 817 558 400 27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474													
20 557 349 441 460 550 584 334 2420 2490 1230 930 394 21 586 343 440 460 552 569 320 2320 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 563 544 287 2350 1980 1090 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 25 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 817 558 400 27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474  TOTAL 15501 11576 12661 14218 14345 16780 11817 47282 62060 29912 27708 11512 MEAN 500 386 408 459 512 541 394 1525 2069 965 894 384 AC-FT 30750 22960 25110 28200 28450 33280 23440 93780 123100 59330 54960 22830 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 1340 505 MIN 270 310 350 380 430 456 287 527 1360 697 474 305													
21 586 343 440 460 552 569 320 2320 2300 1150 807 369 22 600 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 563 544 287 2350 1980 1090 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 25 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 817 558 400 27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474 TOTAL 15501 11576 12661 14218 14345 16780 11817 47282 62060 29912 27708 11512 MEAN 500 386 408 459 512 541 394 1525 2069 965 894 384 AC-FT 30750 22960 25110 28200 28450 33280 23440 93780 123100 59330 54960 22830 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MIN 270 310 350 380 430 456 287 527 1360 697 474 305													
22 600 339 390 460 556 563 299 2380 2060 1180 692 370 23 577 331 385 460 563 544 287 2350 1980 1090 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 55 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 817 558 400 27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474 TOTAL 15501 11576 12661 14218 14345 16780 11817 47282 62060 29912 27708 11512 MEAN 500 386 408 459 512 541 394 1525 2069 965 894 384 AC-FT 30750 22960 25110 28200 28450 33280 23440 93780 123100 59330 54960 22830 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MIN 270 310 350 380 430 456 287 527 1360 697 474 305													
23 577 331 385 460 563 544 287 2350 1980 1090 647 357 24 546 331 390 500 548 575 349 2290 1950 991 615 326 25 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 817 558 400 27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474   TOTAL 15501 11576 12661 14218 14345 16780 11817 47282 62060 29912 27708 11512 MEAN 500 386 408 459 512 541 394 1525 2069 965 894 384 AC-FT 30750 22960 25110 28200 28450 33280 23440 93780 123100 59330 54960 22830 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MIN 270 310 350 380 430 456 287 527 1360 697 474 305 CAL YR 2006 TOTAL 220866 MEAN 605 MAX 2550 MIN 192 AC-FT 438100													
24       546       331       390       500       548       575       349       2290       1950       991       615       326         25       504       321       390       490       531       629       408       2010       1960       864       576       333         26       504       321       400       480       537       572       390       1700       1960       817       558       400         27       511       311       453       460       545       551       406       1460       1920       867       506       362         28       475       312       453       440       543       512       602       1430       1780       1060       500       348         29       491       347       454       490        512       488       1720       1520       1080       494       346         30       481       310       438       490        513       465       1930       1360       1040       502       353         31       477        420       490        492													
25 504 321 390 490 531 629 408 2010 1960 864 576 333 26 504 321 400 480 537 572 390 1700 1960 817 558 400 27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474 TOTAL 15501 11576 12661 14218 14345 16780 11817 47282 62060 29912 27708 11512 MEAN 500 386 408 459 512 541 394 1525 2069 965 894 384 AC-FT 30750 22960 25110 28200 28450 33280 23440 93780 123100 59330 54960 22830 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MIN 270 310 350 380 430 456 287 527 1360 697 474 305													
26 504 321 400 480 537 572 390 1700 1960 817 558 400 27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474 TOTAL 15501 11576 12661 14218 14345 16780 11817 47282 62060 29912 27708 11512 MEAN 500 386 408 459 512 541 394 1525 2069 965 894 384 AC-FT 30750 22960 25110 28200 28450 33280 23440 93780 123100 59330 54960 22830 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MIN 270 310 350 380 430 456 287 527 1360 697 474 305													
27 511 311 453 460 545 551 406 1460 1920 867 506 362 28 475 312 453 440 543 512 602 1430 1780 1060 500 348 29 491 347 454 490 512 488 1720 1520 1080 494 346 30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474   TOTAL 15501 11576 12661 14218 14345 16780 11817 47282 62060 29912 27708 11512 MEAN 500 386 408 459 512 541 394 1525 2069 965 894 384 AC-FT 30750 22960 25110 28200 28450 33280 23440 93780 123100 59330 54960 22830 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MIN 270 310 350 380 430 456 287 527 1360 697 474 305													
28													
29       491       347       454       490        512       488       1720       1520       1080       494       346         30       481       310       438       490        513       465       1930       1360       1040       502       353         31       477        420       490        492        1950        937       474          TOTAL       15501       11576       12661       14218       14345       16780       11817       47282       62060       29912       27708       11512         MEAN       500       386       408       459       512       541       394       1525       2069       965       894       384         AC-FT       30750       22960       25110       28200       28450       33280       23440       93780       123100       59330       54960       22830         MAX       723       461       454       514       563       629       602       2420       2540       1340       1340       505         MIN       270       310       350       380													
30 481 310 438 490 513 465 1930 1360 1040 502 353 31 477 420 490 492 1950 937 474   TOTAL 15501 11576 12661 14218 14345 16780 11817 47282 62060 29912 27708 11512   MEAN 500 386 408 459 512 541 394 1525 2069 965 894 384   AC-FT 30750 22960 25110 28200 28450 33280 23440 93780 123100 59330 54960 22830   MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505   MIN 270 310 350 380 430 456 287 527 1360 697 474 305    CAL YR 2006 TOTAL 220866 MEAN 605 MAX 2550 MIN 192 AC-FT 438100													
31 477 420 490 492 1950 937 474  TOTAL 15501 11576 12661 14218 14345 16780 11817 47282 62060 29912 27708 11512  MEAN 500 386 408 459 512 541 394 1525 2069 965 894 384  AC-FT 30750 22960 25110 28200 28450 33280 23440 93780 123100 59330 54960 22830  MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505  MIN 270 310 350 380 430 456 287 527 1360 697 474 305  CAL YR 2006 TOTAL 220866 MEAN 605 MAX 2550 MIN 192 AC-FT 438100													
TOTAL 15501 11576 12661 14218 14345 16780 11817 47282 62060 29912 27708 11512 MEAN 500 386 408 459 512 541 394 1525 2069 965 894 384 AC-FT 30750 22960 25110 28200 28450 33280 23440 93780 123100 59330 54960 22830 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MIN 270 310 350 380 430 456 287 527 1360 697 474 305 CAL YR 2006 TOTAL 220866 MEAN 605 MAX 2550 MIN 192 AC-FT 438100													
MEAN         500         386         408         459         512         541         394         1525         2069         965         894         384           AC-FT         30750         22960         25110         28200         28450         33280         23440         93780         123100         59330         54960         22830           MAX         723         461         454         514         563         629         602         2420         2540         1340         1340         505           MIN         270         310         350         380         430         456         287         527         1360         697         474         305           CAL YR         2006         TOTAL         220866         MEAN         605         MAX         2550         MIN         192         AC-FT         438100	31	4//		420	490		432		1950		951	4/4	
MEAN         500         386         408         459         512         541         394         1525         2069         965         894         384           AC-FT         30750         22960         25110         28200         28450         33280         23440         93780         123100         59330         54960         22830           MAX         723         461         454         514         563         629         602         2420         2540         1340         1340         505           MIN         270         310         350         380         430         456         287         527         1360         697         474         305           CAL YR         2006         TOTAL         220866         MEAN         605         MAX         2550         MIN         192         AC-FT         438100	тотат.	15501	11576	12661	14218	14345	16780	11817	47282	62060	29912	27708	11512
AC-FT 30750 22960 25110 28200 28450 33280 23440 93780 123100 59330 54960 22830 MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MIN 270 310 350 380 430 456 287 527 1360 697 474 305 CAL YR 2006 TOTAL 220866 MEAN 605 MAX 2550 MIN 192 AC-FT 438100													
MAX 723 461 454 514 563 629 602 2420 2540 1340 1340 505 MIN 270 310 350 380 430 456 287 527 1360 697 474 305 CAL YR 2006 TOTAL 220866 MEAN 605 MAX 2550 MIN 192 AC-FT 438100													
MIN 270 310 350 380 430 456 287 527 1360 697 474 305  CAL YR 2006 TOTAL 220866 MEAN 605 MAX 2550 MIN 192 AC-FT 438100													
CAL YR 2006 TOTAL 220866 MEAN 605 MAX 2550 MIN 192 AC-FT 438100													
WTR YR 2007 TOTAL 275372 MEAN 754 MAX 2540 MIN 270 AC-FT 546200	CAL YR	2006	TOTAL	220866	MEAN	605 MAX	255	0 MIN	192	AC-FT	438100		
	WTR YR	2007	TOTAL	275372	MEAN	754 MAX	254	10 MIN	270	AC-FT	546200		

MAX DISCH: 2670 CFS AT 18:30 ON Jun. 6, 2007 GH 8.28 FT. SHIFT -0.04 FT. MAX GH: 8.28 FT. AT 18:30 ON Jun. 6, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 07096000 ARKANSAS RIVER AT CANON CITY CO WY2007 HYDROGRAPH



#### 07097000 ARKANSAS RIVER AT PORTLAND, CO

LOCATION.--Lat 38°23'18", long 105°00'56", in NE½NE¼ sec. 20, T.19 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on right bank at bridge on State Highway 120 at Portland and 1 mi downstream from Hardscrabble Creek.

DRAINAGE AREA. -- 4,024 mi<sup>2</sup>.

DAY

OCT

TOTAL

TOTAL

CAL YR 2006

TOTAL.

MEAN

AC-FT

WTR YR

MAX

MTN

NOV

GAGE. --Sutron 8210 satellite-monitored data collection platform (DCP) and high data rate transmitter (HDR) with shaft encoder and a graphic water-stage recorder in 36-inch diameter CMP shelter and well. Primary record is DCP data with the graphic chart recorder used for backup purposes. Primary reference gage is a drop tape referenced to an adjustable RP mounted on the instrument shelf inside the shelter. A cablecar is suspended from a monorail attached to upstream side of Hwy 120 bridge 10-15 feet downstream from gage. USGS Hydrolab monitored by DCP for water temperature and specific conductance. The shaft encoder was replaced on Feb 27, 2007. The graphic chart recorder was replaced January 16, 2007, after continual problems with clock stopping.

REMARKS.--Record is complete and reliable, except for: Nov. 29-30; Dec. 1-5, 21-26, 2006; and Jan. 1-4, 6-8, 12-28, 30; Feb. 1-4 and 16, 2007, when ice on the control and in the channel affected the stage-discharge relationship. Record is considered good, except during periods of estimated (ice-affected) flows, which is poor, and the period Nov. 23-28, 2006, which is fair due to missing DCP data and suspect chart data. Station maintained and record developed by M.A. Perry.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

MAR

APR

MAY

204 AC-FT

AC-FT

JUN

JUL

AUG

RATING TABLE. -- ARKPORCO10 USED FROM 01-OCT-2006 TO 30-SEP-2007

DEC

JAN

FEB

42.6 1.0 2.0 2.1 5.81 2.4 2.5 

MIN

2650 MTN

MAX DISCH: 3310 CFS AT 19:15 ON Jun. 26, 2007 GH 5.74 FT. SHIFT -0.13 FT. MAX GH: 5.74 FT. AT 19:15 ON Jun. 26, 2007

657 MAX

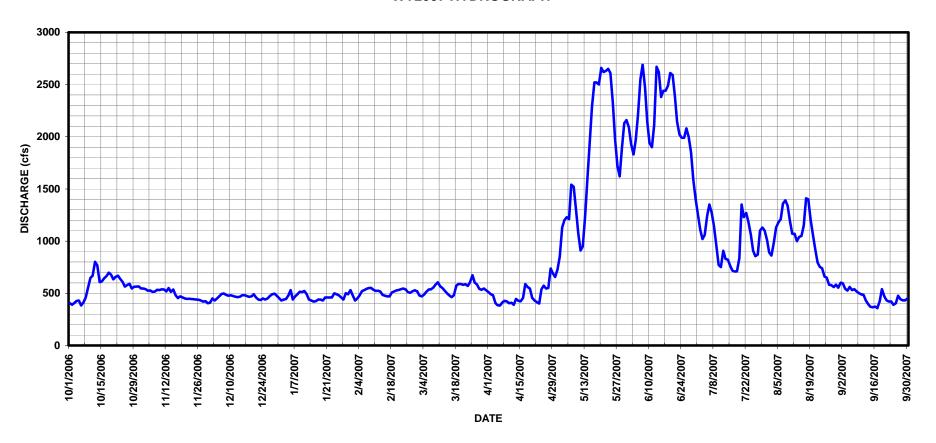
832 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

239986 MEAN

303644 MEAN

# 07097000 ARKANSAS RIVER AT PORTLAND CO WY2007 HYDROGRAPH



#### 07099400 ARKANSAS RIVER ABOVE PUEBLO, CO

LOCATION.--Lat 38°16'18", long 104°43'03", in SE4NE4 sec. 36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on left bank of Arkansas River, 200' downstream from NE corner of Arkansas River bridge, approx. 0.4 mi. downstream from Pueblo Dam, and 7 mi. West of Pueblo.

DRAINAGE AREA AND PERIOD OF RECORD. -- 4,670 mi<sup>2</sup>. October 1965 to current year. Periodic water quality and sediment data available Oct. 1965 to current year.

GAGE. -- Satellite-monitored data collection platform (high data rate Sutron 8210 DCP), Sutron Accububble, shaft encoder and chart recorder in a 4 ft x 4 ft concrete block shelter over a stilling well. Primary record is the DCP log of accububble data. The graphic chart recorder and shaft encoder data are used for backup purposes when the stilling well has good contact with the river (gage height 1.80 ft and above). Primary reference gage is outside staff gage for lower flows (maximum gage height of 2.69 feet), and an electric drop tape referenced to a fixed index mounted on the instrument shelf inside the shelter for higher flows (gage height 2.69 ft and above). Cableway approximately 20 feet upstream from gage. USGS Hydrolab monitored by DCP. Elevation of gage is 4740 ft above NGV Datum of 1929.

REMARKS.--Record is complete and reliable for entire water year. For the period from July 1-4, there were accububble problems. Chart and shaft encoder data were used without loss of accuracy. Record good. Station maintained and record developed by A.D. Gutierrez.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

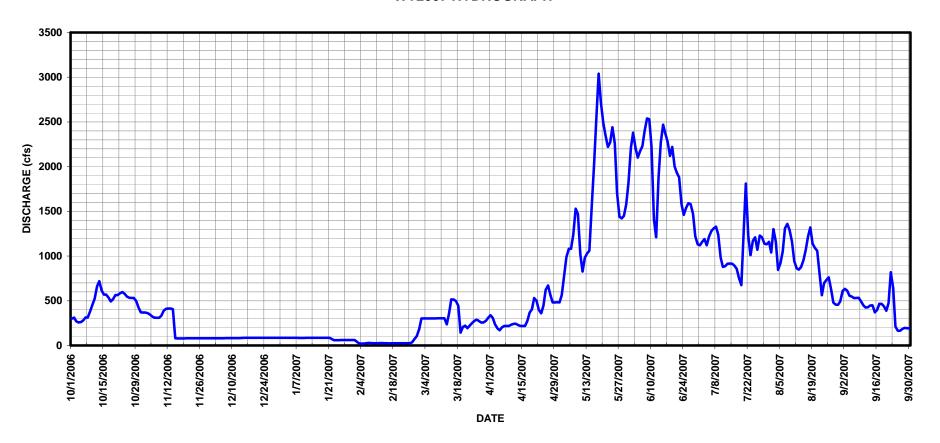
RATING TABLE. -- ARKPUECO17 USED FROM 01-OCT-2006 TO 30-SEP-2007

DAY 1 2 3	OCT 299 311 271 258 261 280	NOV 368 369 362 348	DEC 80 80 80	JAN 86 85	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
2	311 271 258 261	369 362 348	80		60							
	271 258 261	362 348		8.5		183	338	482	2210	1120	1040	610
3	258 261	348	80		40	303	308	564	2380	1160	1300	634
9	261			85	21	303	237	784	2210	1190	1160	614
4			80	85	21	302	191	988	2100	1120	844	556
5	280	323	80	86	21	302	170	1080	2170	1220	922	547
6		311	81	86	25	303	204	1080	2230	1280	1050	529
7	313	310	82	85	28	303	219	1240	2400	1310	1310	531
8	313	310	82	84	26	302	219	1530	2540	1330	1360	534
9	383	333	83	84	25	304	219	1470	2530	1240	1290	493
10	455	390	83	84	25	304	233	1020	2220	985	1160	449
11	522	409	83	85	25	304	242	827	1410	878	945	424
12	661	413	82	86	26	304	244	981	1210	888	862	428
13	720	413	83	86	26	237	229	1030	1880	915	849	447
14	613	406	84	86	25	358	219	1060	2270	917	878	449
15	569	80	85	85	25	516	219	1560	2470	914	955	371
16	569	78	86	85	24	513	219	2010	2370	892	1070	397
17	535	79	86	85	25	498	272	2550	2280	858	1220	465
18	492	79	86	85	25	443	368	3040	2120	755	1320	466
19	519	79	86	85	25	144	404	2720	2220	675	1140	438
20	564	80	86	85	25	208	529	2490	2000	1250	1090	389
21	563	80	85	86	25	221	500	2350	1930	1810	1060	474
22	583	80	86	73	25	194	399	2220	1880	1230	798	819
23	598	80	85	59	25	224	359	2270	1580	1010	562	640
24	578	80	86	59	25	250	446	2440	1460	1170	698	212
25	548	80	85	59	25	275	623	2260	1540	1210	733	165
26	533	80	86	60	35	290	671	1710	1590	1070	762	164
27	531	80	86	60	74	273	567	1440	1580	1230	627	186
28	532	80	86	60	105	255	481	1420	1470	1210	479	196
29	499	80	86	60		257	481	1450	1220	1140	457	193
30	427	80	86	60		275	483	1580	1130	1130	454	192
31	370		86	60		310		1820		1160	493	
TOTAL	14670	6340	2601	2399	882	9258	10293	49466	58600	34267	28888	13012
MEAN	473	211	83.9	77.4	31.5	299	343	1596	1953	1105	932	434
AC-FT	29100	12580	5160	4760	1750	18360	20420	98120	116200	67970	57300	25810
MAX	720	413	86	86	105	516	671	3040	2540	1810	1360	819
MIN	258	78	80	59	21	144	170	482	1130	675	454	164
CAL YR WTR YR	2006 2007	TOTAL TOTAL	173788 230676	MEAN MEAN	476 MAX 632 MAX	358 304	0 MIN 0 MIN		AC-FT AC-FT	344714 457500		

MAX DISCH: 3300 CFS AT 02:30 ON May. 19, 2007 GH 6.19 FT. SHIFT 0.16 FT. DATUM CORRECTION 0.00 FT. MAX GH: 6.19 FT. AT 02:30 ON May. 19, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 07099400 ARKANSAS RIVER ABOVE PUEBLO CO WY2007 HYDROGRAPH



#### 07111000 HUERFANO RIVER AT MANZANARES CROSSING NEAR REDWING, CO

LOCATION.--Lat 37°43'40", long 105°21'03", in sec 5, T.27 S., R.71 W., Huerfano County, on left bank at Manzanares crossing, 500 ft downstream from private bridge, .2 mi downstream from Manzanares Creek, and 3.5 mi southwest of Redwing.

DRAINAGE AREA. -- 73 mi<sup>2</sup>.

GAGE.--Sutron 8210 satellite-monitored high data rate data collection platform (DCP) with shaft encoder and graphic water-stage recorder, inside a 48-inch diameter corrugated metal pipe (CMP) shelter and well. Shaft encoder and chart set to inside electric tape gage. DCP logger is primary record with DCP data and A-35 chart record used for back-up purposes. Station is also equipped with an air temperature sensor and a tipping bucket raingage. Elevation of gage approximately 8190 ft MSL (from topographic map).

REMARKS.--Record complete and reliable, except for the following periods: November 12-30, Dec. 1-16, 2006, February 6-12, 18-28, March 1-6, 29-31, April 5-7, 10-15, 2007, when the stage-discharge relationship was affected by ice in the well or the river; and December 17-31, 2006, January 1-31, February 1-5, 13-17, 2007, when the well was frozen. Record fair, except for periods of no gage height and ice affected record, which should be considered poor. Station maintained and record developed by A.D. Gutierrez.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

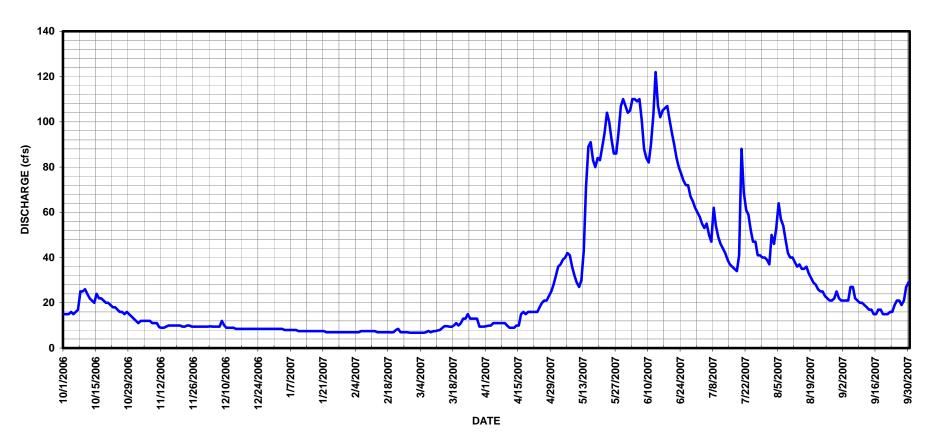
RATING TABLE. -- HURREDCO23 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	CAN VALUE	S					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	12		8.5	7.0	6.8	9.7	32	104	60	37	21
2	15	11	9.5	8.5	7.0	6.8	9.9	36	105	58	50	21
3	15	12		8.5	7.0	6.8	10	37	110	55	46	21
4	16	12		8.0	7.0	6.8	11	39	110	53	53	21
5	15	12		8.0	7.0	6.8	11	40	109	55	64	27
6	16	12		8.0	7.5	7.0	11	42	110	50	57	27
7	17	12		8.0	7.5	7.6	11	41	101	47	54	22
8	25	11			7.5	7.0	11	36	88	62	48	21
9	25	11		8.0	7.5	7.4	11	32	84	54	42	20
10	26	11		7.5	7.5	7.5	10	29	82	49	40	20
11	24	9.2		7.5	7.5	7.8	9.0	27	90	46	40	19
12	22	9.0		7.5	7.5	8.0	9.0	30	103	44	38	18
13	21	9.0		7.5	7.0	8.9	9.0	43	122	42	36	17
14	20	9.5	8.5	7.5	7.0	9.7	10	71	107	39	37	17
15	24	10	8.5	7.5	7.0	9.7	10	89	102	37	35	15
16	22	10		7.5	7.0	9.5	15	91	105	36	35	15
17	22	10		7.5	7.0	9.4	16	83	106	35	36	17
18	21	10		7.5	7.0	10	15	80	107	34	33	17
19	20	10		7.5	6.9	11	16	84	101	41	31	15
20	20	10		7.5	7.0	10	16	83	95	88	29	15
21	19	9.5	8.5	7.5	8.0	11	16	89	90	69	28	15
22	18	9.5	8.5	7.0	8.5	13	16	95	84	61	26	16
23	18	10		7.0	7.0	13	16	104	80	59	25	16
24	17	10		7.0	7.0	15	18	100	77	52	25	19
25	16	9.5		7.0	7.0	13	20	92	74	47	23	21
26	16	9.5	8.5	7.0	7.0	13	21	86	72	47	22	21
27	15	9.5		7.0	6.8	13	21	86	72	41	21	19
28	16	9.5	8.5	7.0	6.8	13	23	95	67	41	21	21
29	15	9.5	8.5	7.0		9.5	25	107	65	40	22	27
30	14	9.5		7.0		9.5	28	110	62	40	25	29
31	13		8.5	7.0		9.5		107		39	22	
TOTAL	578	308.7	277.6	233.5	201.5	297.0	434.6	2116	2784	1521	1101	590
MEAN	18.6	10.3	8.95	7.53	7.20	9.58	14.5	68.3	92.8	49.1	35.5	19.7
AC-FT	1150	612	551	463	400	589	862	4200	5520	3020	2180	1170
MAX	26	12	12	8.5	8.5	15	28	110	122	88	64	29
MIN	13	9.0	8.5	7.0	6.8	6.8	9.0	27	62	34	21	15
CAL YR	2006	TOTAL	5711.8	MEAN	15.6 MAX	5	8 MIN	8.5	AC-FT	11330		
	2007	TOTAL	10442.9	MEAN	28.6 MAX	12			AC-FT	20710		

MAX DISCH: 128 CFS AT 05:15 ON Jun. 13, 2007 GH 2.91 FT. GH CORR. -0.08 FT. SHIFT 0.34 FT. MAX GH: 2.83 FT. (GH CORR. -0.08 FT. APPLIED) AT 05:15 ON Jun. 13, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 07111000 HUERFANO RIVER AT MANZANARES CROSSING NEAR REDWING CO WY2007 HYDROGRAPH



#### HUERFANO RIVER AT BADITO, CO

LOCATION.--Latitude 37° 43' 39", Longitude 105° 00' 50" (Farisita, Colorado quadrangle, 1:24000 scale) in the E½ SE4 Sec.5, T27S, R68W, Huerfano County on left bank, 30 feet downstream of the crossing of CR 616 bridge and Huerfano River.

DRAINAGE AREA. -- 532 sq mi.

GAGE. -- Sutron SatLink 2 high data rate satellite-monitored data collection platform (DCP) and Sutron Accubar in a 4 ft x 6 ft steel shelter. The primary record is the DCP log data with satellite data used for backup. The primary reference gage is a concrete slope gage immediately below the orifice. Elevation of gage is approximately 6,435 ft above mean sea level from topographic map.

REMARKS.--Record is complete and reliable, except for the periods: October 26-31, November 1-3, 15-21, 27-30; December 1-31, 2006; January 1-31; February 1-21, 25-28; March 1-6, 29-31; and April 12-16, 2007, when ice in the river affected the stage-discharge relationship. During the period 1800-2000 hrs July 19, 2007, the diversion dam ~1000 ft upstream failed during a rain event. This caused the accubar to sense false gage height due to heavy sediment loading on the orifice and debris along with rock ranging in size from large gravel to small boulders to move past the gage. The peak gage height of 9.78 ft occurred during this event, however on the August 10, 2007 site visit, a high water line of ~4.00 feet was observed. Record fair, except during periods of sediment loading and ice effect, which are considered poor. The peak gage height and discharge are also estimated and should be considered poor. maintained and record developed by A.D. Gutierrez.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

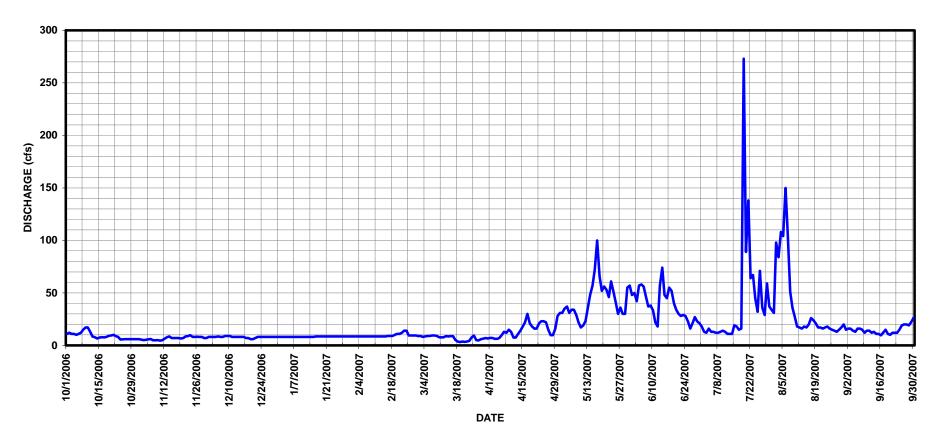
RATING TABLE. -- HUEBADCO02A USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHA	mgr, in c	ME	CAN VALUE		IO SEFIE	MDER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.0	8.0	8.0	8.5	9.0	7.1	31	48	18	31	15
2	12	5.5	8.0	8.0	8.5	9.0	7.0	31	50	13	98	16
3	11	5.0	8.0	8.0	8.5	8.0	6.3	35	42	12	84	16
4	11	5.4	8.0	8.0	8.5	8.5	6.3	37	57	16	108	14
5	10	5.8	8.5	8.0	8.5	9.0	7.2	31	58	13	104	13
6	11	6.1	8.0	8.0	8.5	9.0	10	34	56	13	150	16
7	12	4.8	8.0	8.0	8.5	9.5	13	34	46	12	105	16
8	15	4.9	9.0	8.0	8.5	9.4	12	29	37	12	51	15
9	17	5.0	9.0	8.0	8.5	9.2	15	22	38	13	36	12
10	17	4.6	9.0	8.0	8.5	7.8	13	17	33	14	27	14
11	13	4.8	8.0	8.0	8.5	7.6	7.4	19	22	13	18	14
12	8.5	6.4	8.0	8.0	8.5	7.8	7.5	23	18	11	17	12
13	7.7	7.7	8.0	8.0	8.5	8.8	11	36	57	11	16	13
14	6.5	8.6	8.0	8.0	8.5	8.5	14	48	74	11	18	11
15	7.5	7.0	8.0	8.0	8.5	8.8	18	57	48	19	17	11
16	7.8	7.0	8.0	8.5	9.0	8.9	22	72	45	18	20	9.6
17	7.6	7.0	7.0	8.5	9.0	5.2	30	100	55	15	26	12
18	8.1	7.0	7.0	8.5	9.0	3.7	21	66	52	16	24	15
19	9.1	6.5	6.0	8.5	10	3.2	18	52	40	273	21	11
20	9.4	7.0	6.0	8.5	11	3.6	16	56	34	89	17	10
21	10	8.5	7.0	8.5	11	3.4	16	53	30	138	17	12
22	8.8	8.9	8.0	8.5	12	3.7	21	46	28	64	16	12
23	8.0	9.7	8.0	8.5	14	4.2	23	61	29	67	17	12
2.4	5.7	8.0	8.0	8.5	14	7.5	23	51	28	45	18	15
25	5.8	8.1	8.0	8.5	9.5	9.4	22	41	23	32	16	19
26	6.0	8.3	8.0	8.5	9.5	5.1	15	30	16	71	15	20
27	6.0	8.0	8.0	8.5	9.5	4.7	9.7	36	21	36	14	20
28	6.0	8.0	8.0	8.5	9.5	5.9	9.7	30	27	29	13	19
29	6.0	7.0	8.0	8.5		6.4	16	30	23	59	15	22
30	6.0	7.0	8.0	8.5		7.0	28	55	21	37	17	26
31	6.0		8.0	8.5		6.5		57		34	20	
TOTAL	286.5	203.6	244.5	256.0	264.5	218.3	445.2	1320	1156	1224	1166	442.6
MEAN	9.24	6.79	7.89	8.26	9.45	7.04	14.8	42.6	38.5	39.5	37.6	14.8
AC-FT	568	404	485	508	525	433	883	2620	2290	2430	2310	878
MAX	17	9.7	9.0	8.5	14	9.5	30	100	74	273	150	26
MIN	5.7	4.6	6.0	8.0	8.5	3.2	6.3	17	16	11	13	9.6
CAL YR	2006	TOTAL	4185.5	MEAN	11.5 MAX	15	4 MIN	1.7	AC-FT	8300		
WTR YR	2007	TOTAL	7227.2	MEAN	19.8 MAX	27	'3 MIN	3.2	AC-FT	14340		

MAX DISCH: 2000 CFS AT 18:45 ON Jul. 19, 2007 GH 4.00 FT. (ESTIMATED) SHIFT 0.10 FT. MAX GH: 4.00 FT. (ESTIMATED) AT 18:45 ON Jul. 19, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# HUERFANO RIVER AT BADITO CO WY2007 HYDROGRAPH



#### 07114000 CUCHARAS RIVER AT BOYD RANCH NEAR LA VETA, CO

LOCATION.--Lat 37°25′12″, long 105°03′08″, in SE¼NE¼SE¼ sec. 24, T.30 S., R.69 W., Huerfano County, on left bank at Boyd Ranch, 29 ft. downstream from private bridge, 1.4 mi downstream from Chaparral Creek, and 6.5 mi southwest of La Veta.

DRAINAGE AREA. -- 56 mi<sup>2</sup>.

GAGE. -- Sutron model 8210 satellite-monitored data collection platform (DCP) with a High Data Rate (HDR) radio transmitter, with shaft encoder and graphic water-stage recorder in a 42-inch diameter corrugated metal pipe (CMP) shelter over 48-inch corrugated pipe well. Shaft encoder and chart are set using a drop-tape from a reference mark on the front of the equipment shelf. DCP log is primary record with graphic chart record and satellite data used for back-up purposes. Station is also equipped with an air temperature sensor. Supplemental outside staff gage is not currently used.

REMARKS.--Record is complete and reliable, except for the following periods: October 26, 27, November 1, 2, 10-12, 15-21, 25-30, December 1-31, 2006, January 1-14, 30, February 6-8, 12-19, 23-28, and March 1-9, 12, 29-31, April 6-8, 11-14, 2007, when the stage-discharge relationship was affected by ice in the well and river channel; and, January 15-29, 31, February 1 -5, 2007, when the well was frozen. Record considered good, except during periods of no gage height and ice affected record, which are poor. Station maintained and record developed by A.D. Gutierrez.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

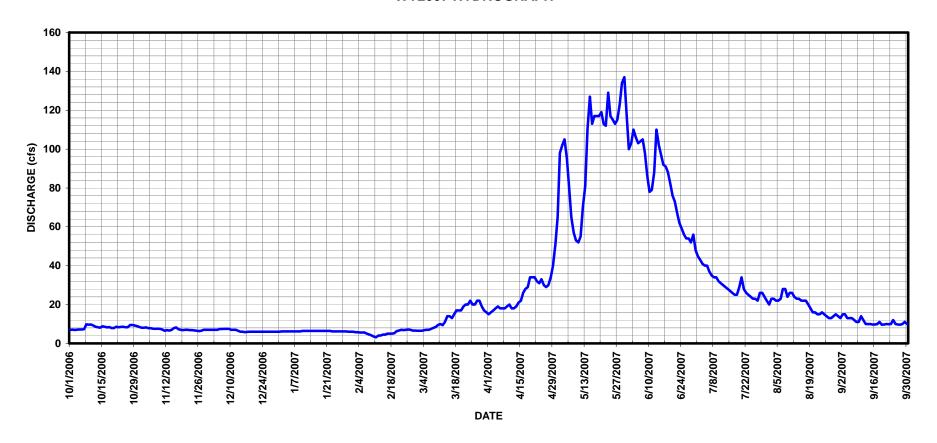
RATING TABLE. -- CRBRLVC014 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	AN VALUES						
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	8.1	7.0		6.0	6.5	15	65	100	45	20	13
2	7.1	8.1	7.0		5.8	6.5	16	98	103	43	23	15
3	6.9	8.2	7.0		5.8	6.5	17	102	110	41	23	15
4	7.1	7.8	7.0		5.6	6.8	18	105	106	40	22	13
5	7.2	7.8	7.4		5.6	7.0	19	95	103	40	22	13
6	7.2	7.6	7.4		5.6	7.0	18	80	104	37	23	13
7	7.3	7.5	7.5		5.0	7.5	18	65	105	35	28	12
8	9.8	7.6	7.5		4.6	8.0	18	57	98	34	28	11
9	9.6	7.5	7.5		4.1	8.5	19	53	86	34	24	11
10	9.7	7.2	7.0		3.5	9.5	20	52	78	32	26	14
11	9.2	6.5	7.0		3.1	10	18	55	79	31	26	12
12	8.6	6.8	7.0		4.0	9.4	18	70	88	30	24	10
13	8.3	6.6	6.5	6.4	4.0	11	19	81	110	29	23	10
14	8.1	6.9	6.0		4.5	14	21	110	102	28	23	10
15	8.8	7.8	6.0	6.4	4.5	14	22	127	97	27	22	9.7
16	8.6	8.2	5.8		5.0	13	26	113	92	26	22	9.7
17	8.2	7.3	5.9	6.4	5.0	15	28	117	91	25	22	10
18	8.4	7.0	6.0		5.0	17	29	117	88	25	20	11
19	7.9	6.8	6.0		5.3	17	34	117	82	29	18	9.6
20	7.9	7.0	6.0	6.4	6.3	17	34	119	76	34	16	9.7
21	8.6	7.0	6.0		6.6	19	34	113	73	28	16	10
22	8.3	6.8	6.0		7.0	20	32	112	67	26	15	9.9
23	8.5	6.8	6.0		6.8	20	31	129	62	25	15	10
24	8.6	6.7	6.0	6.2	7.0	22	33	117	59	24	16	12
25	8.3	6.5	6.0	6.2	7.2	20	30	115	56	23	15	10
26	8.3	6.3	6.0		7.0	20	29	113	54	23	14	9.7
27	9.5	6.5	6.0	6.2	6.6	22	30	115	54	22	13	9.6
28	9.5	7.0	6.0	6.2	6.6	22	34	123	52	26	13	10
29	9.2	7.0	6.0	6.2		19	40	134	56	26	14	11
30	8.9	7.0	6.0	6.0		17	51	137	48	24	15	10
31	8.5		6.0	6.0		16		118		22	14	
TOTAL	259.1	215.9	200.5	194.4	153.1	428.2	771	3124	2479	934	615	333.9
MEAN	8.36	7.20	6.47	6.27	5.47	13.8	25.7	101	82.6	30.1	19.8	11.1
AC-FT	514	428	398	386	304	849	1530	6200	4920	1850	1220	662
MAX	9.8	8.2	7.5	6.4	7.2	22	51	137	110	45	28	15
MIN	6.9	6.3	5.8	6.0	3.1	6.5	15	52	48	22	13	9.6
CAL YR	2006	TOTAL	2915.1	MEAN	7.99 MAX	15.0	MIN	4.8	AC-FT	5782		
WTR YR	2007	TOTAL	9708.1	MEAN	26.6 MAX	137	MIN	3.1	AC-FT	19260		

MAX DISCH: 139 CFS AT 19:30 ON May. 23, 2007 GH 1.64 FT. SHIFT -0.05 FT. MAX GH: 1.64 FT. AT 19:30 ON May. 23, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 07114000 CUCHARAS RIVER AT BOYD RANCH NEAR LA VETA CO WY2007 HYDROGRAPH



#### CUCHARAS RIVER AT HARRISON BRIDGE NEAR LA VETA, CO

LOCATION.--Lat 37° 33' 02", Long 104° 56' 11", in the NE4 SW4 Sec.6, T29S, R67W Huerfano County, on right bank at the Valley Road Harrison Bridge crossing of Cucharas River approximately ¾ mile south of the intersection of Valley Road and Highway 160.

DRAINAGE AREA. --N/A.

WTR YR 2007

GAGE. -- Sutron 8210 data collection platform (DCP) and shaft encoder. The shaft encoder is housed inside of a 20" x 30" metal shelter atop an 18-inch stilling well attached to the center bridge pier. DCP is in a 4 ft x4 ft steel shelter approximately 150 feet south of the right bank. Primary reference gage was a drop tape from a reference mark on the bridge guardrail 20 feet to the right of the stilling well. An electric tape gage was installed in the well on April 4, 2007, at which time it became the primary reference gage. DCP log is primary record with satellite data used for back-up purposes. Elevation of gage is 6648 ft MSL from topographic map.

REMARKS. -- Record is complete and reliable, except for the following periods: November 28-30, December 5, 6, 16, 26-28, 2006, January 10, 11, February 5, 12-18, 24-26, March 1-6, 28-30, 2007, when the stage-discharge relationship was affected by ice in river channel and the well; and December 1-4, 17-25, 29-31, 2006, January 1-9, 12-31, February 1-4, 2007, when the well was frozen. During the period July 18 to August 21, 2007, the DCP stopped recording and lost data, transmitted satellite data were used for the record. Data were lost from 1800 August 20 to 1045 August 21, 2007, due to the shut down. Record good to fair, except during periods of ice effect and no gage height, which are poor. Station maintained and record developed by A.D. Gutierrez.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE .-- CRHRLVCO02 IISED FROM 01-OCT-2006 TO 30-SEP-07

				,	ME	AN VALUES						
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	3.7		1.4	.90	2.5	26	152	120	34	31	14
2	0	3.4	3.4	1.4	1.0	2.0	24	245	122	32	30	17
3	0	3.2		1.5	1.5	2.0	24	260	128	30	29	19
4	0	3.2		1.5	2.5	2.5	26	241	127	28	26	14
5	0	3.1			3.5	5.0	29	211	119	29	25	14
6	0	3.0			9.7	7.5	30	175	113	27	25	17
7	0	4.9			15	9.5	28	151	110	23	52	14
8	.19	5.8			16	10	28	128	102	21	71	12
9	4.8	5.7			17	11	31	111	90	19	43	9.5
10	5.5	4.6		1.5	17	10	34	101	86	19	41	14
11	3.0	4.0			17	14	31	103	79	21	43	15
12	2.1	3.4			15	14	36	121	85	24	37	9.5
13	1.4	4.1			4.0	14	37	130	125	20	32	8.0
14	1.1	4.5		1.0	4.0	17	34	158	118	17	33	7.3
15	1.2	4.2		1.0	3.9	19	56	213	114	15	29	6.8
16	1.2	3.7		.90	3.5	18	92	194	111	11	30	5.7
17	1.3	3.9		.90	3.1	20	115	180	105	9.2	30	5.4
18	1.9	3.3		.90	3.5	24	113	178	101	8.5	28	6.1
19	2.1	3.0		.90	3.7	28	120	169	96	25	25	5.1
20	2.0	3.1			3.3	28	115	165	86	110	20	4.3
21	2.2	3.4			3.0	30	106	165	76	101	16	4.1
22	2.3	3.1			3.1	32	98	159	76	45	14	4.4
23	2.1	2.9		.90	3.3	36	91	160	69	31	11	4.1
24	2.4	2.4			2.5	48	95	162	56	24	13	4.0
25	3.1	2.4		.90	3.5	47	87	141	48	20	12	5.0
26	4.5	2.4		.90	3.5	39	83	133	44	19	10	5.0
27	4.1	2.4		.90	2.9	42	79	128	53	18	12	4.7
28 29	7.1 7.9	2.6 4.2			2.7	40 35	94 116	135 144	41 46	30 97	13 15	5.7 11
30				.90		30		144		58		
31	6.4 4.6	3.8	1.9 1.4	.90 .90		30	136	131	38	40	18 16	9.8
31	4.0		1.4	.90		30		131		40	10	
TOTAL	74.49	107.4	117.8	33.60	169.60	667.0	2014	4992	2684	1005.7	830	275.5
MEAN	2.40	3.58	3.80	1.08	6.06	21.5	67.1	161	89.5	32.4	26.8	9.18
AC-FT	148	213	234	67	336	1320	3990	9900	5320	1990	1650	546
MAX	7.9	5.8	14	1.7	17	48	136	260	128	110	71	19
MIN	0	2.4	1.4	.80	.90	2.0	24	101	38	8.5	10	4.0
CAL YR	2006	TOTAL	1301.22	MEAN	3.56 MAX	17.0	MIN	0	AC-FT	2580		

MAX DISCH: 286 CFS AT 22:45 ON May. 2, 2007 GH 3.08 FT. SHIFT 0.03 FT. MAX GH: 3.08 FT. AT 22:45 ON May. 2, 2007

35.5 MAX

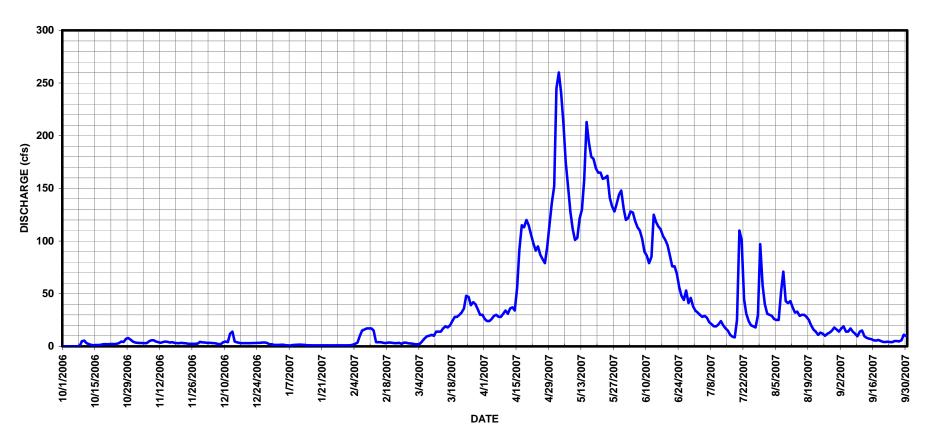
FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

TOTAL 12971.09 MEAN

260 MIN

0 AC-FT

# CUCHARAS RIVER AT HARRISON BRIDGE NEAR LA VETA CO WY2007 HYDROGRAPH



#### OXFORD FARMERS DITCH NEAR NEPESTA, CO

LOCATION.--Lat 38° 10' 34", Long 104° 8' 42", in the NE4 NW4 SW4 Sec.32, T21S, R60W Pueblo County, Hydrologic Unit 11020005, approximately 0.33 mi upstream from Arkansas River at Nepesta Rd. Bridge river gage.

DRAINAGE AREA. --N/A.

CAL YR 2006

WTR YR 2007

TOTAL

GAGE.--Sutron SatLink DCP/logger with High Data Rate radio, which monitors a shaft encoder in a stilling well inside a wood frame shelter at a standard 12-foot concrete Parshall Flume. A float-activated A-35 graphic water-stage recorder is also in the stilling well. Primary record is the DCP log data with satellite-monitored data and the graphic chart recorder used for backup purposes. Primary reference gage is outside staff gage installed in flume.

REMARKS.--Record is complete and reliable. Record is considered good. Record developed by A.D. Gutierrez.

RATING TABLE. -- ST12FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES DAY OCT NOV DEC FEB APR MAY JUN JUL AUG SEP JAN MAR Λ Λ 8.3 8.3 2.4 9.7 2.3 .78 8.3 5.3 2.3 1.5 1.7 .66 2.3 ٩n 2.5 8.5 2.6 2.2 7.3 2.4 Ω ---8.3 2.0 \_\_\_ 5.0 2.0 \_\_\_ \_\_\_ \_\_\_ \_\_\_ \_\_\_ TOTAL 196.4 831 1735.44 2635.3 MEAN 19.6 6.55 26.8 57.8 79.8 87.8 84.6 93.6 27.4 AC-FT MAX MIN .66

MAX DISCH: 133 CFS AT 09:30 ON Jul. 24, 2007 GH 1.92 FT. SHIFT 0 FT. MAX GH: 1.92 FT. AT 09:30 ON Jul. 24, 2007

27.0

40.6 MAX

MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

9851 MEAN

TOTAL 14828.14 MEAN

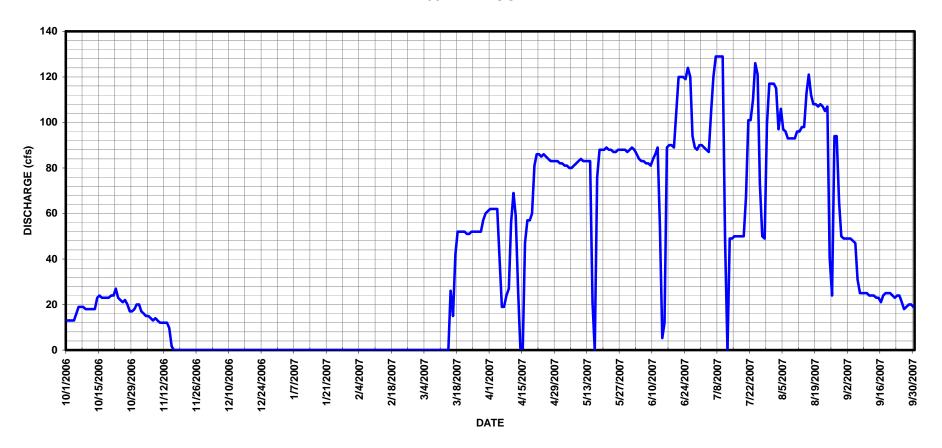
MIN

MTN

0 AC-FT

0 AC-FT

# OXFORD FARMERS DITCH NEAR NEPESTA CO WY2007 HYDROGRAPH



07117000 ARKANSAS RIVER AT NEPESTA ROAD BRIDGE NEAR NEPESTA, CO (RIVER ONLY)

LOCATION.--Lat 38° 10' 44", Long 104° 8' 20", in the NE4 SE4 NW4 Sec.32, T21S, R60W Pueblo County, Hydrologic Unit 11020005, on the left bank downstream side of the Nepesta Road Bridge crossing the Arkansas River, 0.8 mi downstream of Kramer Creek, 9 mi downstream from Huerfano River, 1 mile NNW of the Nepesta Cemetery.

DRAINAGE AREA. -- 9,345 mi<sup>2</sup>.

GAGE. -- Sutron 8210 High Data Rate satellite-monitored data collection platform (DCP) with data logger and Sutron Accubar with constant nitrogen bubbling using a site feed assembly in a 4 ft x 4 ft steel shelter. The primary record is the DCP log data with satellite data used for backup. The primary reference gage is a wire weight gage attached to the bridge approximately 120 ft south of the shelter. Elevation of gage is 4,355 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record is complete and reliable, except for the periods: December 21-24, 29-31, 2006; January 1-31, February 1-6, 12-15, and March 1-7, 2007, when ice affected the stage-discharge relationship. Record is considered good, except during periods of ice affected record, which are poor. Station maintained and record developed by A.D. Gutierrez.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

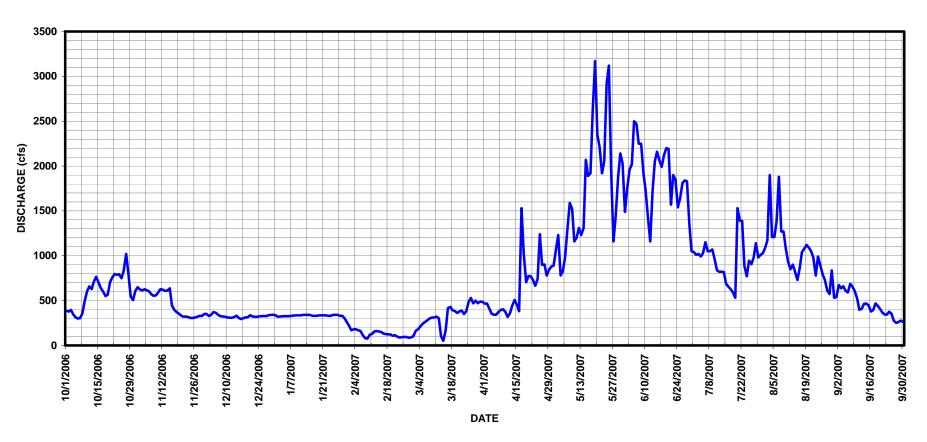
RATING TABLE.--ARKNEPCO15 USED FROM 01-OCT-2006 TO 30-SEP-2007

			220011		ME	CAN VALUE	ES	10 02112				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	389	650	352	320	220	105	465	890	1490	1040	1090	539
2	378	624	328	322	170	165	468	1070	1750	1010	1170	674
3	396	614	341	324	180	180	410	1230	1960	1020	1900	637
4	347	626	372	326	180	210	353	779	2020	992	1210	660
5	314	616	364	326	170	240	342	829	2500	1030	1210	609
6	300	602	343	326	160	260	342	986	2470	1150	1390	591
7	305	571	326	330	114	280	373	1310	2250	1050	1880	687
8	359	553	322	334	81	300	396	1590	2250	1050	1270	655
9	490	558	319	335	76	311	403	1520	1930	1070	1270	607
10	603	592	314	335	119	313	375	1160	1730	965	1070	525
11	658	628	308	335	129	321	318	1200	1420	838	933	397
12	628	620	308	340	155	303	358	1310	1160	821	849	408
13	713	609	316	340	160	103	444	1230	1720	823	901	463
14	766	611	332	340	155	51	507	1310	2050	818	823	467
15	702	636	307	340	150	169	454	2070	2160	687	730	446
16	639	443	294	330	132	415	382	1890	2060	655	860	379
17	599	396	303	330	127	430	1530	1920	1990	628	1040	396
18	551	371	312	330	123	393	1020	2620	2120	592	1080	470
19	563	354	316	335	123	384	704	3170	2200	531	1120	440
20	707	332	338	335	107	363	773	2350	2190	1530	1090	407
21	757	319	322		114	379	773	2210	1570	1390	1050	366
22	796	322	320		98	388	728	1920	1900	1390	979	345
23	788	316	320		88	349	666	2050	1850	885	780	345
24	793	307	324		93	381	741	2920	1540	770	991	377
25	749	305	326		95	486	1240	3120	1640	946	889	352
26	836	313	328		94	529	899	1960	1810	906	794	274
27	1020	319	327		86	470	903	1160	1840	982	729	251
28	802	330	337		90	499	779	1440	1830	1140	612	260
29	550	329	340			471	845	1870	1350	982	573	277
30	504	351	342			488	880	2140	1050	1010	837	263
31	607		338	260		487		2030		1030	532	
TOTAL	18609	14217	10139	10208	3589	10223	18871	53254	55800	29731	31652	13567
MEAN	600	474	327		128	330	629	1718	1860	959	1021	452
AC-FT	36910	28200	20110	20250	7120	20280	37430	105600	110700	58970	62780	26910
MAX	1020	650	372	340	220	529	1530	3170	2500	1530	1900	687
MIN	300	305	294		76	51	318	779	1050	531	532	251
CAL YR	2006	TOTAL	206867	MEAN	567 MAX	387		85	AC-FT	410314		
WTR YR	2007	TOTAL	269860	MEAN	739 MAX	317	70 MIN	51	AC-FT	535300		

MAX DISCH: 4180 CFS AT 01:45 ON Aug. 3, 2007 GH 14.53 FT. GH CORR. 0.10 FT. SHIFT -0.78 FT. MAX GH: 14.63 FT. (GH CORR. 0.10 FT. APPLIED) AT 01:45 ON Aug. 3, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 07117000 ARKANSAS RIVER AT NEPESTA ROAD BRIDGE NEAR NEPESTA CO (RIVER ONLY) WY2007 HYDROGRAPH



#### 07117000 ARKANSAS RIVER AT NEPESTA ROAD BRIDGE NEAR NEPESTA, CO (COMBINED)

LOCATION.--Lat 38° 10' 44", Long 104° 8' 20", in the NE¼ SE¼ NW¼ Sec.32, T21S, R60W Pueblo County, Hydrologic
Unit 11020005, on the left bank downstream side of the Nepesta Road Bridge crossing the Arkansas River,
0.8 mi downstream of Kramer Creek, 9 mi downstream from Huerfano River, 1 mile NNW of the Nepesta
Cemetery.

DRAINAGE AREA. -- 9,345 mi2.

REMARKS.-- The combined record of mean daily discharge was obtained by the addition of Oxford Farmers Ditch mean daily flows to the corresponding mean daily flows in the Arkansas River at Nepesta Road Bridge. The peak discharge for the year was 4260 cfs at 01:45 August 3, 2007. Combined record is fair, except during periods of estimated flow, which should be considered poor. The Arkansas River near Nepesta CO gaging station was moved from above the Oxford Farmers Ditch diversion to the Nepesta Road bridge below the diversion beginning October 1, 2000. For consistency and comparison with previously published historical record in this reach of the Arkansas River, the total Arkansas River flow is computed by combining the Oxford Ditch mean daily discharge with the mean daily discharge measured at Arkansas River at Nepesta Road Bridge near Nepesta CO gaging station. Record developed by Div. II Hydrographic Staff.

#### ARKANSAS RIVER AT NEPESTA BRIDGE AND OXFORD FARMERS DITCH (COMBINED)

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

MEAN VALUES DAY OCT VOV DEC MAT. FEB MAR APR MAY JUIL TITT. AUG SEP 2.2 2.6 2.92 \_\_\_ ------\_\_\_ TOTAL MEAN AC-FT MAX 

1040 MIN

3260 MTN

76 AC-FT

54 AC-FT

MAX DISCHARGE: 4260 CFS AT 01:45 ON Aug. 3, 2007.

TOTAL

TOTAL.

MTN

CAL YR

WTR YR 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

8.5

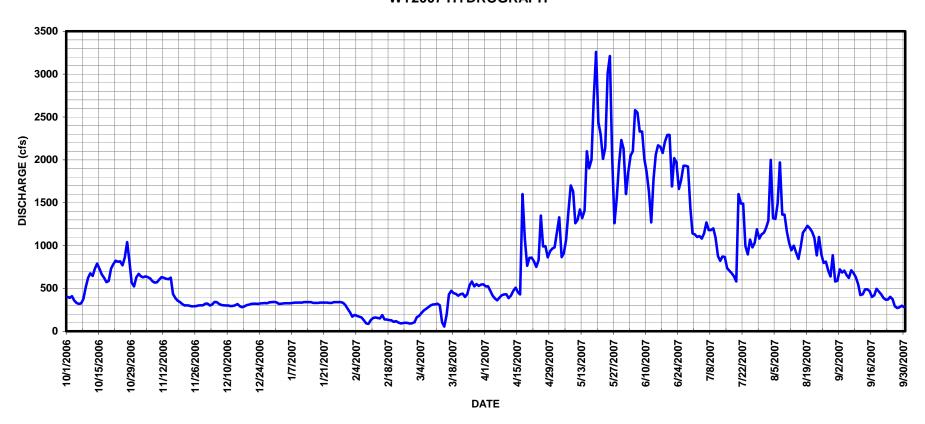
1359 MAX

780 MAX

496093 MEAN

284717 MEAN

# 07117000 ARKANSAS RIVER AT NEPESTA ROAD BRIDGE AND OXFORD FARMERS DITCH NEAR NEPESTA CO (COMBINED) WY2007 HYDROGRAPH



#### 07119700 ARKANSAS RIVER BELOW CATLIN DAM, NEAR FOWLER, CO

LOCATION.--Lat 38°07'33", long 103°54'41", in NW4NW4 sec. 21, T.22 S., R,58 W., Otero County, Hydrologic Unit 11020005, at the Catlin Canal flume, on right bank 0.9 mi downstream from diversion dam for Catlin Canal, 1.0 mi downstream from Apishapa River, and 6.0 mi east of Fowler.

DRAINAGE AREA AND PERIOD OF RECORD. -- 10,901 mi<sup>2</sup>. October 1964 to current year.

GAGE.--Satellite-monitored data collection platform (Sutron Model 8210 HDR DCP), and Accubar in 8 ft by 8 ft shelter. Primary record is DCP data log. Satellite-monitored data used for backup purposes. staff gage is primary reference gage. Cableway approximately 0.8 mile upstream. Catlin Canal flume gage height and USGS water quality monitor also monitored by this DCP. A floodblock was installed in Sept. 2007 to anchor the orifice line conduit for the river gage. In December 2005 the old orifice conduit moved due to ice heave, necessitating the new floodblock. New conduit was laid from the junction with the high water orifice line out to the river. A new muffler was installed.

REMARKS.--Record is complete and reliable, except for the following periods: Nov 30, Dec 1-6, 20-31, 2006, Jan 1-31, Feb 1-17, 2007, due to ice affecting the stage-discharge relationship; and Sep. 21-25, 2007, due to equipment problems/bad data during floodblock construction. Record good, except for periods of ice effect and equipment problems, which should be considered poor. Station maintained and record developed by A. Adame.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

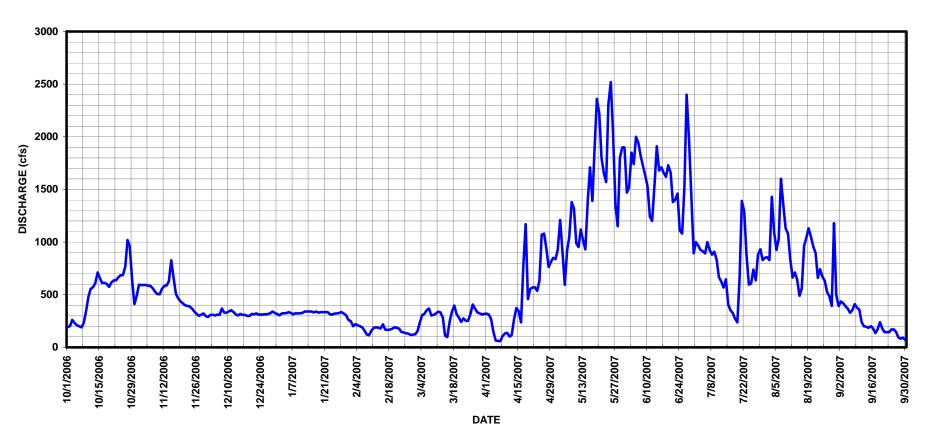
RATING TABLE. -- ARKCATCO11 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCH	ANGE, IN C		EAN VALUE		IO SEFIE	MDER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	596	288	304	250	125	320	838	1470	1000	855	392
2	204	591	309		200	152	312	928	1520	967	828	436
3	261	592	310		220	236	271	1210	1850	926	1430	420
4	233	592	303	325	210	306	146	920	1740	914	1100	391
5	209	585	312		200	318	65	594	2000	892	926	369
6	201	583	308		190	352	61	913	1940	1000	1030	328
7	190	560	369		158	370	60	1050	1820	924	1600	352
8	233	528	331		121	303	108	1380	1720	880	1350	411
9	348	506	328	322	115	309	132	1320	1630	909	1130	378
10	478	505	341		160	321	138	988	1530	835	1080	357
11	554	556	352		185	339	102	953	1240	667	838	242
12	571	583	338	340	190	333	118	1120	1200	624	663	200
13	610	588	315	340	185	284	265	1010	1550	569	712	196
14	712	627	302	340	180	113	374	930	1910	646	646	185
15	656	826	317	340	219	97	345	1390	1680	411	489	200
16	611	664	309	332	168	246	237	1710	1710	353	560	179
17	613	507	308	341	166	338	763	1390	1660	326	964	137
18	602	466	300	330	168	397	1170	1900	1620	274	1040	171
19	575	437	298	335	177	317	457	2360	1730	237	1130	238
20	615	420	317	335	190	281	553	2220	1660	663	1050	178
21	635	400	314	335	185	242	569	1800	1380	1390	961	145
22	637	393	322	335	178	275	572	1650	1400	1290	895	145
23	664	387	311	314	147	252	536	1570	1460	882	660	145
24	685	369	312		142	253	634	2310	1110	596	742	170
25	686	340	313		134	317	1070	2520	1080	606	669	170
26	766	319	315		131	408	1080	2040	1520	739	634	146
27	1020	299	316		119	371	943	1360	2400	637	525	92
28	961	310	324		120	333	763	1150	1970	881	487	82
29	636	322	341			324	810	1800	1450	932	393	92
30	410	297	327			313	850	1900	894	828	1180	70
31	493		317	260		318		1900		851	500	
TOTAL	16260	14748	9867	10065	4808	8943	13824	45124	47844	23649	27067	7017
MEAN	525	492	318		172	288	461	1456	1595	763	873	234
AC-FT	32250	29250	19570		9540	17740	27420	89500	94900	46910	53690	13920
MAX	1020	826	369		250	408	1170	2520	2400	1390	1600	436
MIN	190	297	288		115	97	60	594	894	237	393	70
CAL YR	2006	TOTAL	170344	MEAN	467 MAX	361			AC-FT	410100		
WTR YR	2007	TOTAL	229216	MEAN	628 MAX	252	20 MIN	60	AC-FT	454600		

MAX DISCH: 3480 CFS AT 02:30 ON Jun. 27, 2007 GH 5.89 FT. SHIFT -0.19 FT. MAX GH: 5.89 FT. AT 02:30 ON Jun. 27, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 07119700 ARKANSAS RIVER BELOW CATLIN DAM NEAR FOWLER CO WY2007 HYDROGRAPH



#### 07119705 CATLIN CANAL NEAR FOWLER, CO

LOCATION.--Lat 38°07'33", long 103°54'41", in NW4NW4 sec. 21, T.22 S., R.58 W., Otero County, Hydrologic Unit 11020005, at river gage.

DRAINAGE AREA. --N/A.

GAGE.--Float-activated graphic water-stage recorder and shaft encoder in 8' x 8' shelter with well (with equipment for Arkansas River below Catlin Dam near Fowler CO river gage). Shaft encoder is connected to satellite-monitored data collection platform (DCP) used for river gage. Primary record is DCP log file with the graphic chart recorder used for backup purposes. Fifteen-foot standard concrete Parshall flume is the control. Primary reference gage is outside staff gage installed in flume. Elevation of canal gage is 4,257.87 ft. above National Geodetic Vertical Datum of 1929.

REMARKS.--Record is complete and reliable. Record good. Station maintained and record developed by A. Adame.

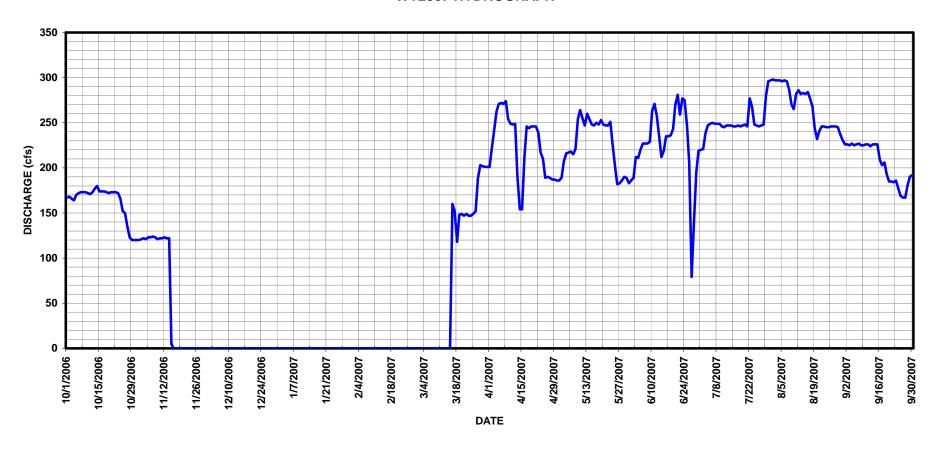
RATING TABLE. -- STD15FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE,	IN CFS		EAR OCTO AN VALUE		TO SEPTE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	120	0	0	0	0	201	186	186	220	298	226
2	168	121	0	0	0	0	223	189	189	221	297	226
3	166	122	0	0	0	0	242	207	212	239	297	225
4	164	121	0	0	0	0	263	216	211	247	297	227
5	170	123	0	0	0	0	271	217	220	249	296	225
6	172	123	0	0	0	0	272	218	227	250	297	226
7	173	124	0	0	0	0	271	215	227	249	296	227
8	173	123	0	0	0	0	274	221	227	249	287	225
9	173	121	0	0	0	0	254	254	229	249	270	225
10	172	122	0	0	0	0	249	264	263	246	265	226
11	171	122	0	0	0	0	248	255	271	245	282	226
12	173	123	0	0	0	0	249	247	258	247	286	224
13	177	122	0	0	0	0	191	260	235	247	282	226
14	180	122	0	0	0	0	154	254	212	247	283	226
15	174	4.8	0	0	0	.52	154	248	219	246	282	226
16	174	0	0	0	0	160	212	247	235	246	284	209
17	174	0	0	0	0	152	246	250	235	247	277	203
18	173	0	0	0	0	118	244	248	236	246	268	206
19	172	0	0	0	0	148	246	253	243	247	244	193
20	173	0	0	0	0	149	246	248	270	248	232	185
21	173	0	0	0	0	147	246	247	281	246	241	185
22	173	0	0	0	0	149	239	247	259	277	246	184
23	172	0	0	0	0	147	217	251	277	268	246	186
24	166	0	0	0	0	147	210	226	275	248	245	177
25	152	0	0	0	0	149	189	202	247	247	245	169
26	150	0	0	0	0	152	190	182	205	246	246	167
27	135	0	0	0	0	188	189	183	79	247	246	167
28	123	0	0	0	0	203	187	186	138	248	246	181
29	120	0	0	0		202	187	190	195	279	245	190
30	120	0	0	0		201	186	189	219	296	237	192
31	120		0	0		201		183		297	231	
TOTAL	5043	1713.8	0	0	0 2	613.52	6750	6983	6780	7784	8294	6180
MEAN	163	57.1	0	0	0	84.3	225	225	226	251	268	206
AC-FT	10000	3400	0	0	0	5180	13390	13850	13450	15440	16450	12260
MAX	180	124	0	0	0	203	274	264	281	297	298	227
MIN	120	0	0	0	0	0	154	182	79	220	231	167
CAL YR WTR YR	2006 2007	TOTAL 433	106.80 MEAN 141.32 MEAN		118 MAX 143 MAX	34 29			AC-FT AC-FT	85500 103400		

MAX DISCH: 302 CFS AT 19:15 ON Aug. 3, 2007 GH 2.81 FT. SHIFT 0 FT. MAX GH: 2.81 FT. AT 19:15 ON Aug. 3, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 07119705 CATLIN CANAL NEAR FOWLER CO WY2007 HYDROGRAPH



#### 07119700 ARKANSAS RIVER BELOW CATLIN DAM NEAR FOWLER, CO (COMBINED)

LOCATION.--Lat 38°07'33", long 103°54'41", in NW4NW4 sec. 21, T.22 S., R.58 W., Otero County.

DRAINAGE AREA. -- 10,901 mi<sup>2</sup>.

REMARKS.--The combined record of discharges was obtained by the addition of Catlin Canal daily flows to the corresponding daily flows in the Arkansas River below Catlin Dam. The peak discharge for the year was 3490 cfs at 02:30 June 27, 2007. Combined record is good, except during periods of estimated flow, which should be considered poor. Record developed by Div. II Hydrographic Staff.

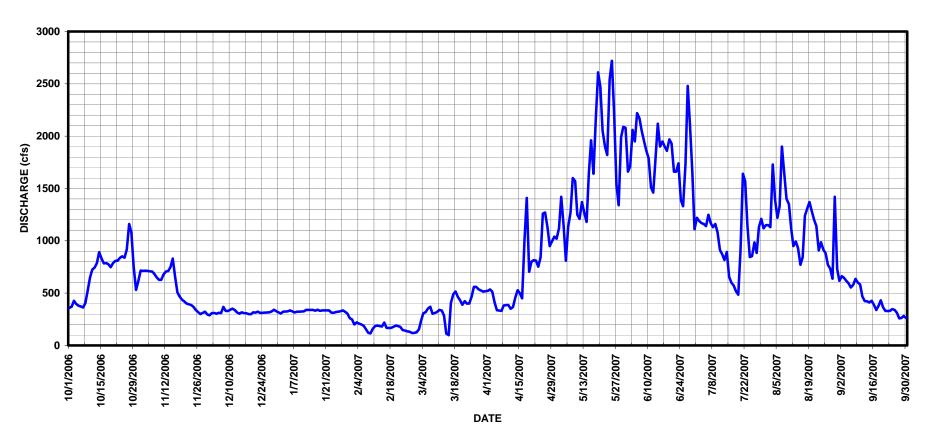
#### ARKANSAS RIVER AND CATLIN CANAL (COMBINED)

			DISCHA	ARGE, IN CF		EAR OCTO		TO SEPTE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	358	716	288	304	250	125	521	1020	1660	1220	1150	618
2	372	712	309	322	200	152	535	1120	1710	1190	1130	662
3	427	714	310	324	220	236	513	1420	2060	1170	1730	645
4	397	713	303	325	210	306	409	1140	1950	1160	1400	618
5	379	708	312	335	200	318	336	811	2220	1140	1220	594
6	373	706	308	326	190	352	333	1130	2170	1250	1330	554
7	363	684	369	315	158	370	331	1270	2050	1170	1900	579
8	406	651	331	323	121	303	382	1600	1950	1130	1640	636
9	521	627	328	322	115	309	386	1570	1860	1160	1400	603
10	650	627	341	324	160	321	387	1250	1790	1080	1350	583
11	725	678	352	326	185	339	350	1210	1510	912	1120	468
12	744	706	338	340	190	333	367	1370	1460	871	949	424
13	787	710	315	340	185	284	456	1270	1790	816	994	422
14	892	749	302	340	180	113	528	1180	2120	893	929	411
15	830	831	317	340	219	98	499	1640	1900	657	771	426
16	785	664	309	332	168	406	449	1960	1950	599	844	388
17	787	507	308	341	166	490	1010	1640	1900	573	1240	340
18 19	775	466	300	330	168	515	1410	2150	1860 1970	520 484	1310	377 431
20	747 788	437 420	298 317	335 335	177 190	465 430	703 799	2610 2470	1970	911	1370 1280	363
21	808	420	317	335	185	389	815	2050	1660	1640	1280	330
22	810	393	322	335	178	424	811	1900	1660	1570	1140	329
23	836	387	311	314	147	399	753	1820	1740	1150	906	331
24	851	369	312	312	142	400	844	2540	1390	844	987	347
25	838	340	313	320	134	466	1260	2720	1330	853	914	339
26	916	319	315	322	131	560	1270	2220	1730	985	880	313
27	1160	299	316	327	119	559	1130	1540	2480	884	771	259
28	1080	310	324	335	120	536	950	1340	2110	1130	733	263
29	756	322	341	321		526	997	1990	1650	1210	638	282
30	530	297	327	305		514	1040	2090	1110	1120	1420	262
31	613		317	260		519		2080		1150	731	
TOTAL	21304	16462	9867	10065	4808	11557	20574	52121	54670	31442	35377	13197
MEAN	687	549	318	325	172	373	686	1681	1822	1014	1141	440
AC-FT	42260	32650	19570	19960	9540	22920	40810	103400	108400	62370	70170	26180
MAX	1160	831	369	341	250	560	1410	2720	2480	1640	1900	662
MIN	358	297	288	260	115	98	331	811	1110	484	638	259
CAL YR WTR YR	2006 2007	TOTAL TOTAL	213524 281444	MEAN MEAN	585 MAX 771 MAX	387 272	0 MIN 0 MIN		AC-FT AC-FT	423500 558200		

MAX. DISCHARGE: 3490 CFS AT 02:30 ON Jun. 27,2007.

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 07119700 ARKANSAS RIVER BELOW CATLIN DAM AND CATLIN CANAL NEAR FOWLER CO (COMBINED) WY2007 HYDROGRAPH



### 07120500 ARKANSAS RIVER NEAR ROCKY FORD, CO

LOCATION.--Lat 38°03'52", Long 103°41'24" in SE 4, NW 4, Sec. 9, T23S, R56W, Hydrologic Unit 11020005, Otero County, on right bank of Arkansas River, approximately 250 feet upstream from State Highway 266, and approximately 1.6 miles NE of Rocky Ford, Colorado.

DRAINAGE AREA AND PERIOD OF RECORD. -- Undetermined. Gage established October 8, 1992.

GAGE. -- High data rate Sutron 8210 DCP and Accububble in a 4' x 4' steel gage shelter. A wire weight gage installed on upstream side of Hwy 266 bridge is the primary reference gage. Primary record is DCP log data with satellite-monitored data used for backup purposes. Elevation of gage datum is 4130.46 ft MSL.

REMARKS.--Record is complete and reliable for the entire water year, except for the following period(s): Nov 30, Dec 1-5, 20-31, 2006, Jan 1-31, Feb 1-6, and 11-16, 2007, due to ice affecting the stage-discharge relationship. Record is fair except for periods of ice effect which should be considered poor. Station maintained and record developed by A. Adame.

RATING TABLE. -- ARKROCCO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHA	RGE, IN CF	S, WATER Y	EAR OCTO		TO SEPTE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	689	48	48	42	73	280	714	1310	1080	681	462
2	240	702	48	48	42	74	302	746	1110	1060	777	434
3	264	673	46	46	42	76	308	936	1490	1030	1100	347
4	294	650	45	46	42	75	245	746	1430	1020	973	285
5	261	624	43	46	42	68	163	466	1610	976	862	280
6	228	599	45	46	44	124	128	680	1720	1040	845	249
7	214	575	44	46	44	344	103	840	1680	1080	1250	223
8	240	555	44	44	44	351	109	1050	1440	985	1280	248
9	277	538	45	44	44	298	121	931	1430	988	933	261
10	416	532	45	44	44	322	140	790	1380	998	1100	244
11	537	550	45	44	43	328	133	877	1270	706	1030	210
12	627	577	45	44	52	337	114	1220	1240	543	936	205
13	656	588	44	40	55	336	163	1140	1490	454	930	194
14	768	513	43	40	58	209	306	822	1900	447	934	162
15	769	685	44	40	58	141	382	1180	1540	422	816	138
16	699	784	44	40	60	143	311	1470	1520	473	734	128
17	688	552	45	46	62	282	199	1040	1460	414	996	115
18	680	322	46	46	64	284	1120	1490	1350	391	1150	89
19	640	129	46	46	68	182	433	1670	1410	276	1190	95
20	673	105	45	46	73	225	568	1740	1350	205	1220	189
21	673	71	47	46	76	202	594	1270	1390	1180	992	171
22	666	61	46	46	82	121	649	1290	1310	1210	937	160
23	644	57	46	46	80	199	611	1270	1600	1020	823	128
24	677	53	45	46	78	268	573	1770	1320	566	637	98
25	741	52	45	45	80	283	734	2280	1260	463	775	105
26	836	51	45	45	78	357	949	2150	1350	560	692	143
27	1040	50	45	45	76	405	829	1540	2440	533	615	102
28	1010	50	46	45	76	284	675	1280	1460	618	591	65
29	798	51	47	45		272	622	1680	1350	811	504	71
30	535	48	47	45		264	696	1760	981	710	954	72
31	497		48	45		271		1820		729	841	
TOTAL	17530	11486	1407	1389	1649	7198	12560	38658	43591	22988	28098	5673
MEAN	565	383	45.4	44.8	58.9	232	419	1247	1453	742	906	189
AC-FT	34770	22780	2790	2760	3270	14280	24910	76680	86460	45600	55730	11250
MAX	1040	784	48	48	82	405	1120	2280	2440	1210	1280	462
MIN	214	48	43	40	42	68	103	466	981	205	504	65
CAL YR	2006	TOTAL	145244	MEAN	398 MAX	242	20 MIN	25	AC-FT	288100		

MAX DISCH: 4030 CFS AT 07:30 ON Jun. 27, 2007 GH 5.06 FT. GH CORR. -0.10 FT. SHIFT -0.19 FT. MAX GH: 4.96 FT. (GH CORR. -0.10 FT. APPLIED) AT 07:30 ON Jun. 27, 2007

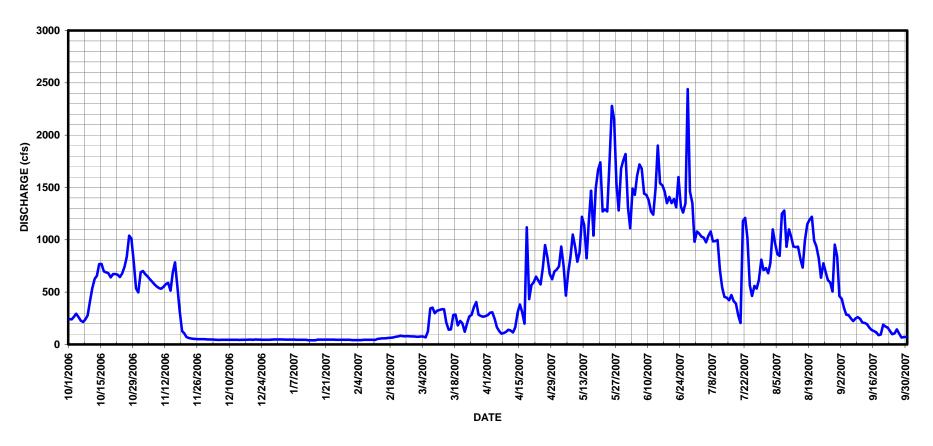
FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

TOTAL 192227 MEAN 527 MAX

WTR YR 2007

2440 MIN 40 AC-FT 381300

# 07120500 ARKANSAS RIVER NEAR ROCKY FORD CO WY2007 HYDROGRAPH



#### 07122400 CROOKED ARROYO NEAR SWINK, CO

LOCATION.--Lat 37°58′56″, long 103°35′52″, in SW4SW4 sec. 5, T.24 S., R.55 W., Otero County, on right bank 54 ft. downstream from bridge on State Highway 10, 2.0 mi. upstream from mouth, and 2.8 mi. southeast of Swink.

DRAINAGE AREA. -- 108 mi<sup>2</sup>.

WTR YR 2007

TOTAL

GAGE.--High data rate Sutron 8210 DCP and Accububble installed in a 4' x 4' steel shelter. Primary record is DCP log file with satellite-monitored data used for backup. Primary reference gage was a staff gage from the beginning of WY07 until it was damaged by others on or around May 16, 2007. Beginning with the May 30, 2007 site visit a temporary reference gage was used by taping down to the water surface from RP#3. The temporary reference gage was used until July 18, 2007, when a new staff gage was installed. Primary reference gage is now the staff gage. A new bubbler line and muffler were installed on May 30, 2007, after channel work by others damaged gage equipment. A new Sutron 8210 DCP was installed on July 11, 2007. Elevation of gage is 4,100 ft. above sea level.

REMARKS.--Record is complete and reliable, except for the following period(s): May 16-30, 2007, due to a damaged orifice line (damaged by others constructing a new water line crossing in the channel); and July 11, 2007, due to a DCP malfunction. Record is rated fair for the entire water year, except for periods of damaged and malfunctioning equipment, which are rated poor. Station maintained and record developed by Adam Adame.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- CANSWKCOO6 USED FROM 01-OCT-2006 TO 30-SEP-2007

				•	ME	AN VALUE	S					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	23	3.4	2.3	1.4	3.7	20	19	20	24	11	27
2	10	17	3.4	2.2	1.4	3.7	14	19	21	26	14	23
3	15	17	3.3	2.2	1.4	3.8	13	16	30	16	11	24
4	15	15	3.1	2.3	1.5	3.8	15	22	35	21	13	22
5	12	20	3.1	2.2	1.6	3.9	17	26	31	18	22	22
6	20	19	3.0	2.1	1.6	3.8	21	30	31	19	24	24
7	22	24	2.9	2.1	1.6	3.8	29	30	32	22	25	24
8	23	23	3.0	2.0	1.6	3.8	34	22	35	22	17	24
9	26	16	2.9	2.0	1.5	3.6	42	15	24	20	19	23
10	21	15	2.9	1.9	1.5	3.5	17	18	24	18	19	23
11	23	27	2.8	1.9	1.6	3.5	25	19	28	16	18	20
12	16	21	2.8	1.9	1.6	3.3	25	24	26	17	20	20
13	15	20	2.8	1.9	1.5	3.2	47	38	67	16	20	21
14	19	23	2.8	1.8	1.6	3.1	25	35	54	16	18	24
15	19	39	2.8	1.7	1.6	2.9	13	33	34	12	19	29
16	17	5.7	2.7	1.8	1.7	2.9	15	30	54	13	22	32
17	27	4.7	2.6	1.7	1.7	2.8	26	30	71	11	27	25
18	21	4.5	2.7	1.7	1.8	2.8	41	30	54	15	29	27
19	17	4.3	2.7	1.7	1.9	25	33	30	29	15	31	32
20	18	4.2	2.9	1.8	2.0	21	36	30	24	11	20	25
21	27	4.1	2.7	1.7	2.1	22	26	25	31	11	22	23
22	24	4.0	2.6	1.5	2.2	15	32	25	25	13	22	23
23	21	4.0	2.6	1.5	2.4	12	36	25	24	20	20	26
24	21	3.9	2.5	1.5	2.7	17	42	23	26	16	17	25
25	14	3.9	2.5	1.5	2.7	18	51	23	21	13	13	14
26	27	3.8	2.5	1.6	2.8	19	32	23	24	13	17	10
27	54	3.8	2.5	1.6	3.2	7.7	30	22	32	16	17	7.2
28	33	3.7	2.5	1.5	3.7	16	32	22	60	17	21	7.8
29	20	3.6	2.6	1.5		26	29	22	24	16	19	15
30	13	3.6	2.5	1.5		21	26	22	23	17	23	22
31	16		2.4	1.5		20		22		15	26	
TOTAL	639	380.8	86.5	56.1	53.9	301.6	844	770	1014	515	616	664.0
MEAN	20.6	12.7	2.79	1.81	1.93	9.73	28.1	24.8	33.8	16.6	19.9	22.1
AC-FT	1270	755	172		107	598	1670	1530	2010	1020	1220	1320
MAX	54	39	3.4	2.3	3.7	26	51	38	71	26	31	32
MIN	10	3.6	2.4	1.5	1.4	2.8	13	15	20	11	11	7.2
CAL YR		TOTAL	3533.3		9.68 MAX		3 MIN		AC-FT	7010		

MAX DISCH: 158 CFS at 17:00 ON JUNE 13, 2007, GH 5.02 FT. GH CORR. -0.60 FT. SHIFT -0.65 FT. MAX GH: 4.42 FT. (GH CORR. -0.60 FT. APPLIED) AT 17:00 ON June 13, 2007

16.3 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

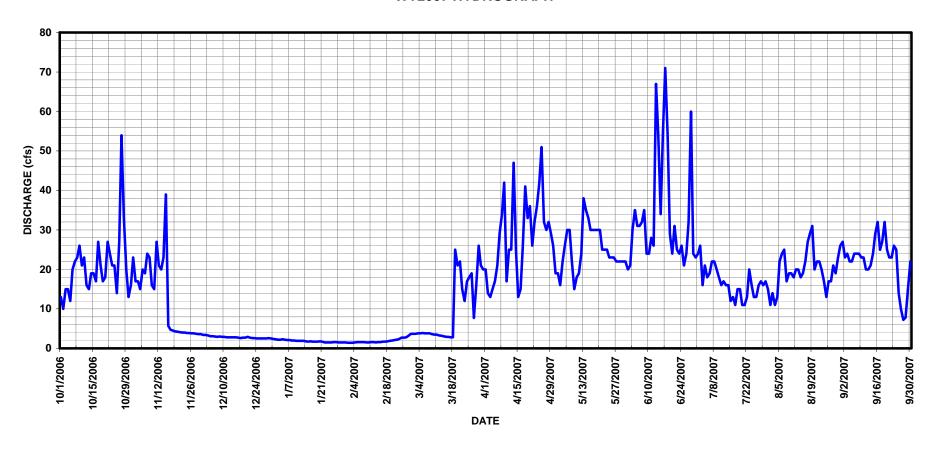
5940.9 MEAN

71 MIN

1.4 AC-FT

11780

# 07122400 CROOKED ARROYO NEAR SWINK CO WY2007 HYDROGRAPH



#### 07123000 ARKANSAS RIVER AT LA JUNTA, CO

LOCATION.--Lat 37°59'26", long 103°31'55" (NAD83), in SW1/4 SE1/4 NE1/4 sec. 2, T.24 S., R.55 W., Otero County, Hydrologic Unit 11020005, on right bank at upstream side of bridge on State Highway 109 in La Junta, 450 ft upstream from King Arroyo at La Junta CO.

DRAINAGE AREA AND PERIOD OF RECORD.--12,210 mi². Staff gage originally established by USGS in 1889, with sporadic data and various locations. Water stage recorder in use since Oct. 1933 at several locations also. Gage site in continuous use since then.

GAGE.--Satellite-monitored data collection platform (Sutron 8210 DCP), and Accububble in 4 ft x 4 ft steel shelter. DCP log file is primary record with satellite data used for backup. Wire-weight gage on bridge serves as primary reference gage. The Sutron Accububbler gage (installed March 2000) was removed and replaced with the Sutron Constant Flow Bubbler on 21 March 2007. Datum of gage is 4040.98 ft above mean sea level, NAVD 88 (computed at 10/4/07 level run from NGS benchmark on north side of Hwy 109 bridge). See WSP 1711 or 1731 for history of changes prior to June 13, 1940. June 13, 1940, to June 6, 1967, water-stage recorder at site 300 ft upstream at present datum.

REMARKS.--Record is complete and reliable, except for: November 29-30, December 1-4, 17, 2006, January 1-29, February 9-13, 2007, when ice affected the stage-discharge relationship; and Jan 30-31, Feb 8, 14-22, 2007, due to Accububbler problems associated with ice in the orifice line. Record good, except for periods of ice affected record and equipment problems, which should be considered poor. Station maintained by A. Adame and record developed by M.A. Perry.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

RATING TABLE. -- ARKLAJCO41 USED FROM 01-OCT-2006 TO 30-SEP-2007

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	58	70	40	80	111	47	77	726	367	490	435
2	154	54	75	40	80	102	41	69	366	377	571	439
3	152	51	75	40	80	100	35	116	635	379	655	435
4	171	49	70	42	70	99	35	119	729	417	748	371
5	164	48	80	45	70	94	36	55	734	412	403	343
6	159	46	79	50	80	91	41	55	1000	422	415	292
7	156	46	77	55	70	287	50	57	947	423	474	244
8	165	45	79	60	50	382	54	168	812	412	672	267
9	198	40	78	65	40	350	59	78	705	412	338	334
10	289	38	76	70	40	367	40	64	603	410	410	300
11	411	42	77	75	70	370	48	135	666	441	440	268
12	494	42	77	80	100	374	46	439	523	374	496	264
13	516	41	75	85	110	370	58	402	667	348	608	239
14	558	268	77	90	120	319	54	179	1100	304	584	212
15	609	582	74	90	130	122	42	466	763	306	521	175
16	573	757	69	90	140	57	42	814	728	303	466	124
17	469	585	60	90	150	96	47	323	728	273	402	94
18	428	452	55	85	160	131	265	716	667	258	459	77
19	380	215	50	75	160	64	88	852	630	198	549	76
20	357	167	45	70	140	101	67	1120	687	167	581	155
21	365	130	40	65	140	251	57	641	762	498	463	131
22	416	107	40	50	140	122	57	722	540	494	446	128
23	419	98	40	40	193	60	59	602	900	472	436	100
24	423	93	40	40	189	57	60	1130	610	298	426	92
25	425	84	40	40	159	52	85	1760	571	391	430	70
26	464	79	40	40	145	53	251	1710	641	522	399	93
27	458	80	40	40	135	41	85	1030	1880	492	421	74
28	298	82	40	40	122	43	68	737	633	513	485	48
29	160	70	40	40		53	63	978	716	596	469	52
30	68	60	40	40		49	71	1020	360	518	431	66
31	59		40	40		46		1120		412	605	
TOTAL	10115	4509	1858	1812	3163	4814	2051	17754	22029	12209	15293	5998
MEAN	326	150	59.9	58.5	113	155	68.4	573	734	394	493	200
AC-FT	20060	8940	3690	3590	6270	9550	4070	35220	43690	24220	30330	11900

382

41

2.65

2100 MIN

1880 MIN

35

1760

5.5

15 AC-FT

35 AC-FT

MAX DISCH: 3100 CFS AT 16:30 ON Jun.27, 2007 GH 11.42 FT. SHIFT -1.89 FT. MAX GH: 11.42 FT. AT 16:30 ON Jun.27, 2007

90

40

193

233 MAX

278 MAX

40

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

8.0

40

85103 MEAN

101605 MEAN

MAX

MTN

CAL YR 2006

WTR YR 2007

609

59

7.57

TOTAL

TOTAL

38

748

338

596

167

168800

201500

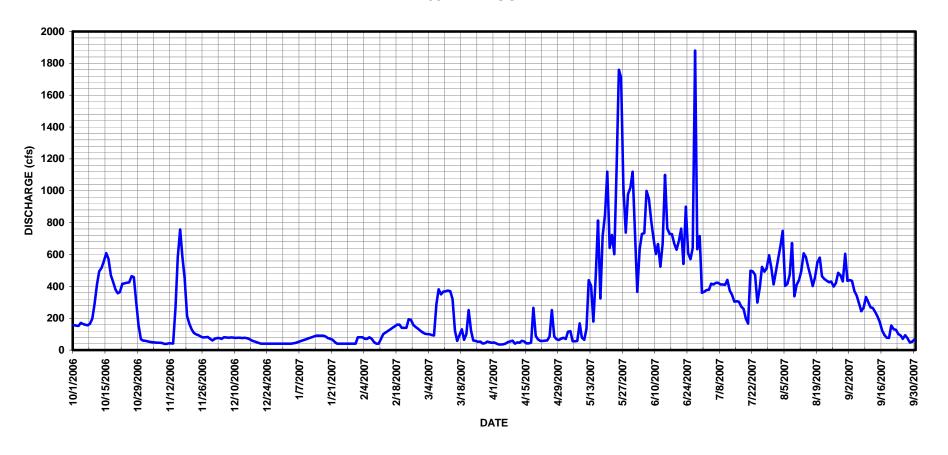
439

48

1880

360

# 07123000 ARKANSAS RIVER AT LA JUNTA CO WY2007 HYDROGRAPH



#### 07123675 HORSE CREEK AT HIGHWAY 194 NEAR LAS ANIMAS, CO

LOCATION.--Lat 38°05′06″, long 103°21′12″, in SE1/4,SW1/4, sec. 33, T.22S., R.53 W., Bent County, Hydrological Unit 11020008, on right bank 15 ft upstream from right end of box culverts on State Highway 194, 3.2 mi upstream from mouth, 3.4 mi downstream from Ft. Lyon Canal Aqueduct, and 7.5 mi west of Las Animas, Co.

DRAINAGE AREA AND PERIOD OF RECORD. -- 1403 sq mi. Established and operated Oct. 19, 1979 to Sep. 30, 1993 by USGS. Operated and maintained by State of Colorado, Oct. 01, 1993 to present.

GAGE. -- Accububble and satellite-monitored data collection platform (Sutron 8210 HDR DCP) in a 4' x 4' steel shelter. Primary record is DCP data log with satellite-monitored data used for backup purposes. Primary reference gage is a staff gage on the right side of the channel just upstream of the concrete weir control. A tipping bucket raingage is also operated at the site. A new 8210 DCP was installed on Aug. 23, 2007. A new muffler and orifice line for the Accububble gage were installed on Aug. 29, 2007. Elevation of gage is 3975 ft above mean sea level from topographic map.

REMARKS.--Record is complete and reliable, except for the following period(s): Dec. 20, 21, and 29-31, 2006, Jan. 1-2, 15-17, Feb. 2-4, 2007, due to ice on control affecting the stage-discharge relationship; and, July 1 - Aug. 29, 2007, when problems with orifice line and muffler on Accububble gage caused gage to not respond properly to changes in gage height. Large datum corrections had to be made to the Accububble gage on July 30, Aug. 25, 29, 2007. Record good, except during periods of ice affected gage height record and problems with the Accububble orifice line and muffler, which should be considered poor. Peak gage height and discharge should also be considered poor as they occurred during period of accububbler problems. Station maintained by A. Adame and record developed by A. Adame and M.A. Perry.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- HRC194CO07 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	•	MEAN VALU	ES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	14		3.9	3.4	12	6.5	26	15	12	29	15
2	2.6	9.0	4.5	4.0	3.3		6.1	24	25	11	15	4.8
3	2.6	24		4.0	3.2		5.9	14	25	13	13	4.0
4	3.9	27		4.0	3.2		5.6	19	28	24	13	3.7
5	13	13		3.9	3.2		5.5	21	31	34	19	3.4
6	16	8.2		3.7	3.2		5.3	8.5	28	33	25	3.9
7	5.0	7.4		3.7	3.3		5.3	15	23	40	19	15
8	3.8	6.9		3.6	3.3		5.4	26	13	47	16	16
9	3.5	20		3.6	3.4	7.4	10	26	11	37	15	6.6
10	3.7	24		3.7	3.6	7.1	20	22	20	31	17	5.3
11	3.5	11		3.7	3.8	9.8	17	9.1	24	25	21	4.8
12	3.3	7.3		3.7	3.9		7.2	7.5	15	25	21	4.9
13	3.3	6.6		3.8	4.0		7.5	13	14	28	21	4.2
14	3.3	12		3.7	3.9	8.2	9.1	24	14	41	18	4.1
15	3.4	9.3		3.6	3.9	7.6	13	20	27	45	20	15
16	3.3	6.9		3.6	4.0	19	26	8.7	28	24	26	16
17	3.2	6.3		3.5	4.0		25	17	28	24	29	6.0
18	3.1	6.0	3.8	3.5	4.5	7.6	12	26	25	27	28	5.2
19	3.2	5.7		3.5	5.5		26	26	14	31	27	4.8
20	3.1	5.6	3.7	3.6	7.4	12	24	25	12	42	29	4.4
21	3.0	5.5		3.6	9.0		12	20	9.5	58	31	3.9
22	3.0	5.4		3.5	12		11	8.2	7.4	49	29	3.6
23	3.0	5.2		3.5	19		9.6	14	8.5	22	25	3.4
24	3.1	5.1		3.5	20		9.4	28	14	17	19	3.3
25	3.4	5.1		3.5	16		11	28	14	30	17	3.1
26	15	5.1		3.5	15		17	28	7.3	33	15	7.5
27	25	5.0		3.4	14		25	26	9.6	17	10	16
28	30	5.0		3.4	14		21	27	13	14	6.7	12
29	30	4.6		3.4		21	11	24	15	13	4.8	4.3
30	30	4.6		3.4		16	15	12	13	14	9.5	3.7
31	27		3.9	3.4		7.2		10		28	19	
TOTAL	261.9	280.8	124.5	112.4	197.0	357.8	384.4	603.0	531.3	889	607.0	207.9
MEAN	8.45	9.36	4.02	3.63	7.04		12.8	19.5	17.7	28.7	19.6	6.93
AC-FT	519	557		223	391		762	1200	1050	1760	1200	412
MAX	30	27		4.0	20		26	28	31	58	31	16
MIN	2.6	4.6		3.4	3.2		5.3	7.5	7.3	11	4.8	3.1
CAL YR	2006	TOTAL	1620.58	MEAN	4.4	MAX	30 MIN	.24	AC-FT	3210		

MAX DISCH: 60.8 cfs AT 10:00 ON Jul. 21, 2007 GH 0.74 FT. GH CORR. 0.91 FT. SHIFT 0.14 FT. MAX GH: 1.65 FT. (GH CORR. 0.91 FT APPLIED) AT 10:00 ON Jul. 21, 2007

12.5 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

MEAN

4557

WTR YR 2007

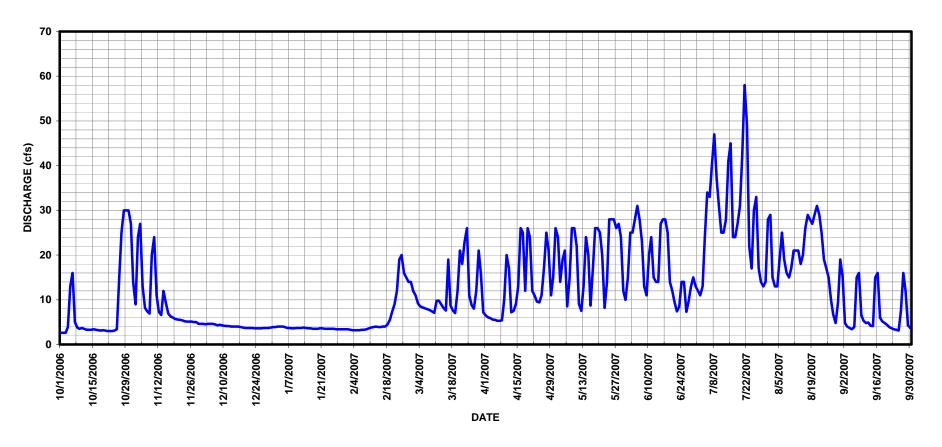
TOTAL

58 MTN

2.6 AC-FT

9040

# 07123675 HORSE CREEK AT HIGHWAY 194 NEAR LAS ANIMAS CO WY2007 HYDROGRAPH



#### RATON CREEK ABOVE STARKVILLE, CO

LOCATION.--Lat 37°07'35.5", Long 104°31'24.8" in NW4, NE4, NE4, Section 35,T33S, R64W, Las Animas County, 20 feet away from the creek on the left upstream side of bridge for road 18.3 approximately half a mile south of Interstate 25 exit 8 south of Trinidad.

DRAINAGE AREA. -- Undetermined.

GAGE.--Sutron SatLink satellite-monitored data collection platform (DCP), with High Data Rate (HDR) radio and shaft encoder. The data logger is housed inside a 4' x 4' metal shelter about 20 feet away from the creek, while the shaft encoder is in a 20'' x 30'' metal shelter on an 18'' corrugated metal pipe stilling well attached to the left bridge wing wall. Shaft encoder is set to an electric drop tape inside the half shelter. Primary record is the DCP data log with satellite data used for back-up purposes.

REMARKS.--Record is complete and reliable, except for the following periods: November 27-30, December 1-5, 17-26, 2006, February 4-7, 13-16, 25, March 1-4, 2007, when ice in the creek affected the stage-discharge relationship; and, December 27-31, 2006, January 1-31, February 1-3, 2007, when the well was frozen. Record good, except during periods of no gage height and ice affected record, which should be considered poor. Station maintained and record developed by A.D. Gutierrez.

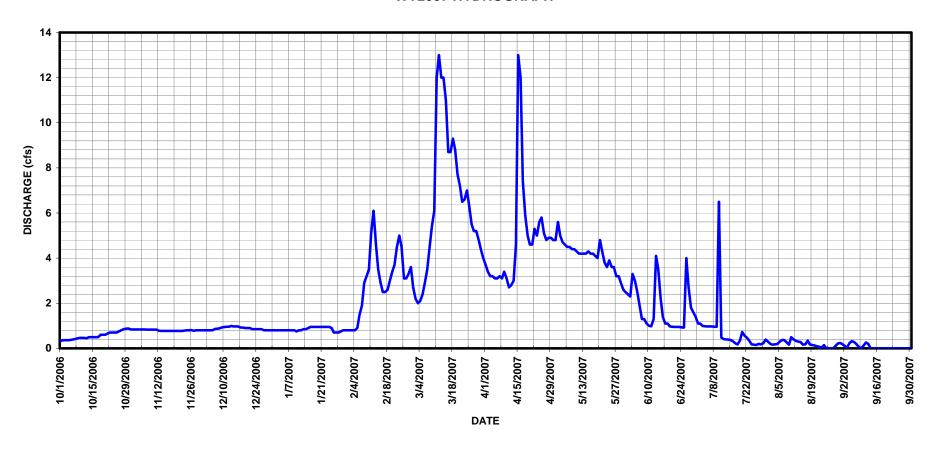
RATING TABLE. -- RACRSTCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHA	RGE, IN C	FS, WATER Y	EAR OCTO		TO SEPTE	EMBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.84	.80	.80	.80	2.7	3.7	4.8	2.4	1.1	.20	.18
2	.36	.84	.80	.80	.80	2.2	3.4	5.6	2.3	1.1	.16	.10
3	.36	.84	.80	.80	.80	2.0	3.2	5.0	3.3	.99	.18	.06
4	.36	.84	.80	.80	.80	2.1	3.2	4.7	3.0	.98	.19	.24
5	.37	.84	.80	.80	.90	2.4	3.1	4.6	2.5	.97	.29	.32
6	.39	.84	.86	.80	1.5	2.9	3.1	4.5	1.9	.97	.37	.28
7	.41	.83	.87	.80	1.9	3.5	3.2	4.5	1.3	.97	.37	.18
8	.44	.83	.89	.80	2.9	4.5	3.1	4.4	1.3	.96	.27	.06
9	.46	.83	.93	.80	3.2	5.4	3.4	4.4	1.1	.96	.16	0
10	.47	.83	.94	.75	3.5	6.1	3.1	4.3	1.0	6.5	.50	.12
11	.46	.83	.96	.80	5.1	12	2.7	4.2	.98	.48	.39	.26
12	.45	.78	.96	.80	6.1	13	2.8	4.2	1.3	.41	.33	.19
13	.50	.77	.99	.85	4.6	12	3.0	4.2	4.1	.40	.30	0
14	.50	.77	.97	.85	3.5	12	4.6	4.2	3.5	.39	.28	0
15	.50	.77	.97	.90	2.9	11	13	4.3	2.2	.37	.16	0
16	.50	.77	.97	.95	2.5	8.7	12	4.2	1.4	.31	.18	0
17	.50	.77	.92	.95	2.5	8.7	7.4	4.2	1.1	.23	.34	0
18	.60	.77	.92	.95	2.6	9.3	5.9	4.1	1.1	.17	.17	0
19	.60	.77	.90	.95	3.0	8.8	5.0	4.0	.97	.35	.15	0
20	.60	.77	.90	.95	3.4	7.7	4.6	4.8	.96	.72	.13	0
21	.66	.77	.90	.95	3.7	7.2	4.6	4.3	.95	.56	.09	0
22	.70	.77	.85	.95	4.5	6.5	5.3	3.8	.95	.47	.07	0
23	.70	.79	.85	.95	5.0	6.6	5.0	3.6	.95	.34	.03	0
24	.70	.80	.85	.95	4.5	7.0	5.6	3.9	.93	.18	.14	0
25	.70	.80	.85	.90	3.1	6.3	5.8	3.6	.92	.16	0	0
26	.76	.81	.85	.70	3.1	5.5	5.1	3.6	4.0	.15	0	0
27	.81	.78	.80	.70	3.3	5.2	4.8	3.2	2.7	.20	0	
28	.85	.80	.80	.70	3.6	5.2	4.9	3.2	1.8	.18	0	0
29	.87	.80	.80	.75		4.8	4.9	2.9	1.6	.23	.11	0
30	.88	.80	.80	.80		4.4	4.8	2.6	1.4	.39	.22	0
31	.84		.80	.80		4.0		2.5		.30	.24	
TOTAL	17.63	24.05	27.10	26.05	84.10	199.7	144.3	126.4	53.91	22.49	6.02	1.99
MEAN	.57	.80	.87	.84	3.00	6.44	4.81	4.08	1.80	.73	.19	.066
AC-FT	35	48	54	52	167	396	286	251	107	45	12	3.9
MAX	.88	.84	.99	.95	6.1	13	13	5.6	4.1	6.5	.50	.32
MIN	.33	.77	.80	.70	.80	2.0	2.7	2.5	.92	.15	0	0
CAL YR	2006	TOTAL	290.61		0.80 MAX	8.			AC-FT	576		
WTR YR	2007	TOTAL	733.74	MEAN	2.01 MAX	1	.3 MIN	0	AC-FT	1460		

MAX DISCH: 501 CFS AT 21:15 ON Jul. 10, 2007 GH 5.29 FT. SHIFT 0.08 FT. MAX GH: 5.29 FT. AT 21:15 ON Jul. 10, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# RATON CREEK ABOVE STARKVILLE CO WY2007 HYDROGRAPH



#### 07124500 PURGATOIRE RIVER AT TRINIDAD, CO

**LOCATION.**—Lat  $37^{\circ}10'15''$ , long  $104^{\circ}30'31''$ , in NW4SE4 sec. 13, T.33 S., R.64 W., Las Animas County, in city of Trinidad, on left bank.

DRAINAGE AREA. -- 795 mi<sup>2</sup>.

GAGE.--Sutron 8210 High Data Rate DCP (satellite monitored data collection platform) controlling a Sutron Accububble system inside a 4' x 4' steel shelter on the left bank above the channel. Orifice line inside 1-½ inch galvanized pipe anchored to the bank extending down and into the channel. Primary record is the DCP log data with satellite-monitored data used for backup purposes. The primary reference gage was a staff gage set in the streambed near the orifice. A wire weight gage was installed August 21, 2007 on the Commercial Street Bridge immediately downstream and in line with the orifice line and staff gage, and became the primary reference gage on that date. A tipping bucket raingage is also installed at the station.

REMARKS.--Record is complete and reliable, except for the following periods: Nov 29-30, Dec 1-10, 20-31, 2006, Jan 1-31, Feb 1-18, 25, Mar 1-4, 2007, when ice at or near the gage affected the gage height. Record considered good, except for days of ice affected gage height record, which are poor. Station maintained and record developed by A.D. Gutierrez.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- PURTRICO26 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	AN VALUES	5					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	2.7		1.5	2.0	5.4	129	128	293	229	180	144
2	88	2.2	1.3	1.5	2.2	4.8	100	180	293	208	175	147
3	64	2.1	1.4	1.5	2.3	4.6	68	243	296	184	162	146
4	53	2.5			2.5	4.3	58	265	363	185	153	145
5	60	2.5		1.5	3.0	4.3	67	262	361	194	155	188
6	67	2.4			3.5	4.2	74	264	313	205	227	219
7	68	1.8			3.5	5.0	74	204	260	218	285	219
8	70	1.9			5.0	5.9	75	151	224	224	278	219
9	68	2.2			5.0	7.8	101	140	218	229	328	218
10	101	2.3			5.2	8.5	120	138	214	236	248	218
11	151	2.3			5.2	14	92	171	214	228	159	195
12	197	2.1			5.2	19	67	195	228	234	151	136
13	150	1.7			5.3	42	67	198	242	236	192	144
14	5.3	1.6			5.5	64	68	193	278	244	243	152
15	4.4	1.8			5.6	37	75	213	298	246	178	139
16	3.4	1.7			5.6	11	173	254	292	245	157	128
17	2.5	1.4			5.5	11	239	268	295	228	176	121
18	3.3	1.4			5.0	11	221	286	259	215	176	109
19	2.8	1.5			6.3	11	183	295	236	211	173	93
20	2.3	1.3			7.8	9.0	134	292	237	222	150	92
21	3.4	1.4			7.9	8.6 7.8	110	303 307	239	223	118 106	97
22 23	3.0 2.2	1.8		1.6	9.4 10		113 137	296	227	222		91
		1.7		1.7		8.0 8.4			220 217	226	111 116	93
24 25	1.8	2.0		1.7	10 6.3	7.9	145 150	292 295	217	220 199	118	96 92
26	5.2	1.8			6.1	6.8	144	288	226	181	118	90
27	3.6	1.8			6.0	6.5	136	286	231	177	180	82
28	3.4	1.5			6.9	6.3	127	286	229	176	230	80
29	3.0	1.6				63	126	250	228	177	205	75
30	2.9	1.6				130	127	226	230	187	154	73
31	2.6	1.0				130	127	265	230	189	149	
21	2.0		2.0	2.3		130		200		109	149	
TOTAL	1334.3	56.6	162.5	51.1	153.8	667.1	3500	7434	7678	6598	5551	4042
MEAN	43.0	1.89			5.49	21.5	117	240	256	213	179	135
AC-FT	2650	112	322	101	305	1320	6940	14750	15230	13090	11010	8020
MAX	197	2.7			10	130	239	307	363	246	328	219
MIN	1.8	1.3	1.2	1.5	2.0	4.2	58	128	214	176	106	74
CAL YR	2006	TOTAL	16479.4	MEAN	45.2 MAX	300	) MIN	0.95	AC-FT	32690		

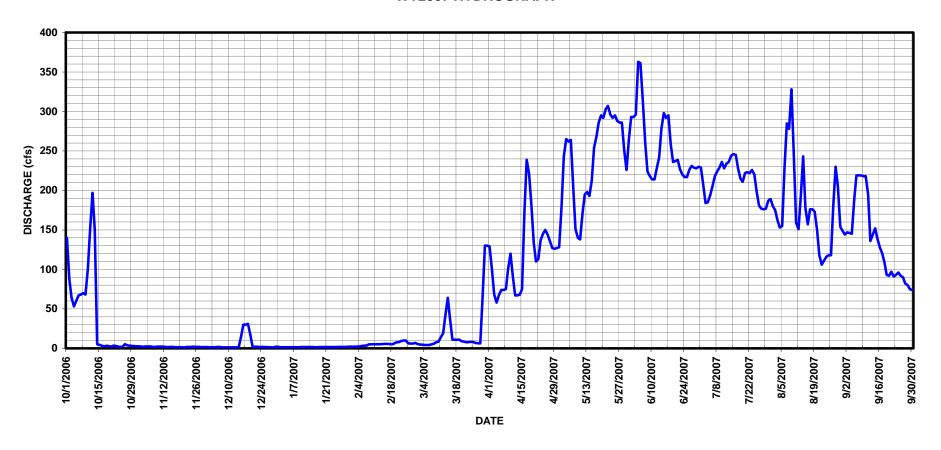
CAL YR 2006 TOTAL 16479.4 MEAN 45.2 MAX 300 MIN 0.95 AC-FT WTR YR 2007 TOTAL 37228.4 MEAN 102 MAX 363 MIN 1.2 AC-FT MAX DISCH: 437 CFS AT 22:45 ON Jul. 10, 2007 GH 3.26 FT. SHIFT -0.32 FT.

MAX GH: 3.26 FT. AT 22:45 ON Jul. 10, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

73840

# 07124500 PURGATOIRE RIVER AT TRINIDAD CO WY2007 HYDROGRAPH



#### 07126500 PURGATOIRE RIVER AT NINEMILE DAM NEAR HIGBEE, CO (RIVER ONLY)

LOCATION.--Lat 37°42'53", long 103°30'38", in NW4 sec. 7, T.27 S., R.54 W., Otero County, Hydrologic Unit 11020010, on left bank at Ninemile Dam, 4 mi southwest of Higbee, and 5.5 mi upstream from Smith Canyon. Prior to Apr. 21, 1978 gage located 850 ft, upstream.

DRAINAGE AREA. -- 2,752 mi<sup>2</sup>.

GAGE--Sutron Accububble and satellite-monitored data collection platform (Sutron 8210 HDR DCP) in a 4 ft by 4 ft steel shelter. The primary reference gage is an outside drop tape from a reference point on a steel "I" beam on the wall face between Ninemile Dam and the Ninemile Canal headgate. Control is the Ninemile Dam. DCP data log file is the primary record with satellite-monitored gage height data providing backup. The 8210 DCP was replaced on 13 Sept 2007 due to missed satellite transmissions and parity errors.

REMARKS.--Record is complete and reliable, except for the following periods: Nov. 4-Nov 28, 2006 and June 29 and 30, 2007, when trash and debris on the crest of the Nine Mile Canal diversion dam (gage control) affected gage heights; and Nov 29-30, Dec 1-31, 2006, Jan 1-31, Feb 1-28, Mar 1-3, 2007, when the stage-discharge relationship was affected by ice. Record fair, except during periods of ice affected and backwater affected record and flows over 500 cfs, which should be considered poor. The record for total flow in the river at this location is computed by adding Ninemile Canal flows to this record. High flows have not been measured at or near the gage due to a lack of facilities. Station maintained by A. Adame and record developed by A. Adame and M. Perry.

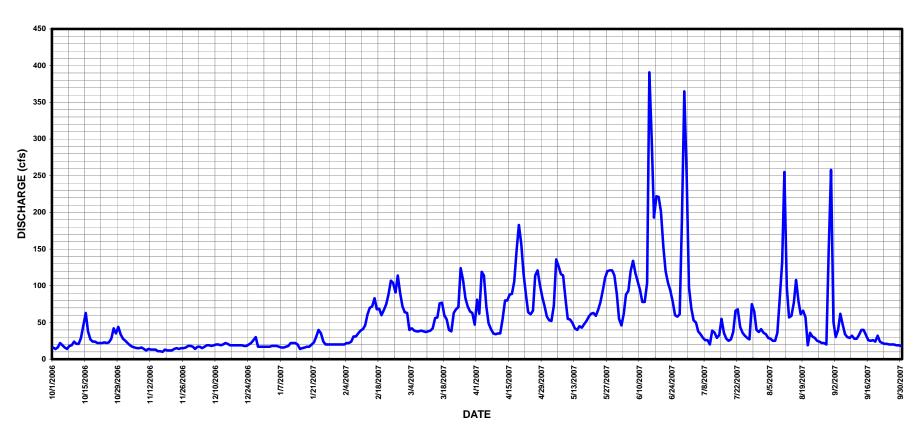
RATING TABLE. -- PURNINCO17 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

1 1 6 25 14 17 20 64 81 58 55 99 41 51 51 2 14 22 17 17 20 63 62 53 46 69 36 30 30 31 6 19 17 18 20 40 119 52 62 53 34 40 40 44 22 17 15 18 20 40 119 52 62 53 34 40 40 44 22 17 15 18 22 42 114 73 88 50 29 62 53 34 46 66 61 61 51 19 17 18 22 39 72 136 93 38 28 47 66 16 15 19 17 24 38 49 127 120 34 25 34 77 14 15 19 16 31 38 49 127 120 34 25 34 77 14 15 19 16 31 38 41 116 134 29 25 30 8 18 16 18 16 31 39 35 114 117 26 36 29 9 19 14 19 17 35 38 34 42 106 26 83 32 10 24 12 20 18 39 37 35 55 94 20 132 28 11 21 14 20 22 41 38 35 54 78 39 255 28 12 21 13 19 22 46 39 55 49 78 39 255 28 13 32 9 13 20 22 61 42 80 42 104 29 57 40 14 46 13 22 20 70 56 80 40 391 33 59 40 15 63 11 21 14 72 57 88 45 297 55 77 33 16 38 11 19 19 15 83 76 89 43 193 36 108 26 17 27 10 19 16 68 77 106 48 222 28 79 25 18 24 20 22 12 19 19 16 68 77 106 48 222 28 79 25 18 22 22 22 14 18 19 17 69 60 149 52 22 22 22 24 44 18 39 35 54 78 39 255 28 12 22 12 29 19 16 68 77 106 48 222 28 79 25 18 24 20 22 22 22 24 22 24 24 28 22 28 79 25 18 24 22 22 24 24 28 24 24 24 24 24 24 24 24 24 25 24 25 25 26 26 26 28 15 26 20 114 108 114 15 58 29 24 22 28 12 25 26 12 26 26 28 15 26 20 114 108 114 115 58 29 24 22 22 24 14 18 31 88 63 88 117 66 93 25 25 26 26 28 15 26 20 114 108 114 115 58 29 24 22 22 24 14 18 31 88 63 88 50 22 24 25 25 26 25 26 26 26 28 15 26 20 114 108 114 115 58 29 24 20 22 25 24 24 26 26 26 26 26 26 26 26 26 26 26 26 26	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
3 16 19 17 18 20 40 119 52 62 53 34 40 40 40 4119 52 62 53 34 40 40 42 21 11 15 18 22 42 114 73 88 50 29 62 55 19 16 17 18 22 39 72 136 93 38 28 47 66 16 15 19 17 24 38 49 127 120 34 25 34 77 14 15 18 16 31 38 41 116 134 29 25 30 8 18 18 16 18 16 31 38 41 116 134 29 25 30 8 18 18 16 18 16 31 39 35 114 117 26 36 29 9 19 14 19 17 35 38 34 82 106 26 83 32 10 24 12 20 18 39 37 35 55 94 20 132 28 11 21 14 20 22 41 38 35 54 78 39 255 28 12 21 13 19 22 46 39 55 49 78 36 98 33 13 29 13 20 22 66 42 80 42 104 29 57 40 14 46 13 22 20 70 56 80 40 391 33 59 40 14 46 13 22 20 70 56 80 40 391 33 59 40 15 63 11 21 14 72 57 88 45 297 55 77 33 16 38 11 19 15 83 76 89 43 193 36 108 26 17 27 27 10 19 16 68 77 106 48 222 28 79 25 18 24 13 19 17 60 54 183 58 221 25 61 26 19 24 13 19 17 69 60 149 52 221 25 61 26 19 24 12 21 19 17 60 54 183 58 201 27 66 24 20 22 12 19 20 67 40 157 60 38 11 29 17 69 60 149 52 221 25 61 26 19 24 12 19 17 60 54 183 58 201 27 66 24 20 22 12 19 20 67 40 157 60 54 183 58 201 27 66 24 20 22 12 19 20 70 67 40 157 62 153 37 57 32 21 22 12 19 23 75 38 117 63 120 66 19 24 22 22 22 12 19 20 67 40 157 62 153 37 57 32 21 22 12 19 23 75 38 117 63 120 66 19 24 22 22 12 19 23 75 38 117 63 120 66 19 24 22 22 12 19 23 75 38 117 63 120 66 19 24 22 22 12 19 20 67 40 157 62 153 37 57 32 21 22 22 14 18 31 88 63 88 59 104 68 36 22 23 23 15 18 40 107 68 64 67 94 44 31 21 25 23 23 15 18 40 107 68 64 67 94 44 31 21 25 23 23 15 18 40 107 68 64 67 94 44 31 21 25 23 23 15 18 40 107 68 64 67 94 44 31 21 25 25 23 15 22 24 91 124 66 93 60 32 25 20 27 42 16 30 20 90 83 121 120 61 27 22 20 22 24 11 18 31 88 63 88 59 104 68 36 22 25 20 27 42 16 30 20 90 83 121 120 61 27 22 20 20 27 42 16 30 20 90 83 121 120 61 27 22 20 20 27 42 16 30 20 90 83 121 120 61 27 22 20 20 27 42 16 30 20 90 83 121 120 61 27 22 20 20 27 42 16 30 20 90 83 121 120 61 27 22 20 20 27 42 16 30 20 90 83 121 120 61 27 22 20 20 27 42 16 30 20 90 83 121 120 61 27 22 20 20 20 44 18 177 20 65 85 121 365 65 20 19 30 30 40 1770 MAX 63 25 30 40 114 124 124 183 136 391 98	1	16	25	14	17	20	64	81	58	55	98	41	51
4 22 17 15 18 22 42 114 73 88 50 29 62 5 19 16 17 18 22 39 72 136 93 38 28 47 6 16 15 19 17 24 38 49 127 120 34 25 34 7 14 15 19 16 31 38 41 116 134 29 25 30 8 18 18 16 18 16 31 39 35 114 117 26 36 29 9 19 14 19 17 35 38 34 82 106 26 83 32 10 24 12 20 18 39 37 35 55 94 20 132 28 11 21 14 20 22 41 38 35 54 78 39 255 28 11 21 14 20 22 41 38 35 54 78 39 255 28 11 21 11 31 19 22 46 39 55 49 78 36 99 83 31 32 9 13 20 22 61 42 80 42 104 29 57 40 15 63 11 21 14 72 57 88 45 297 55 77 33 16 38 11 19 15 83 76 89 43 193 36 108 26 17 27 10 19 16 68 77 106 48 22 28 79 25 18 24 11 27 10 19 16 68 77 106 48 22 22 8 79 25 18 24 12 19 17 69 60 149 52 21 25 61 26 19 24 12 19 17 69 60 149 52 21 27 27 10 19 16 68 77 106 48 22 22 8 79 25 18 24 12 12 12 19 20 67 40 157 62 153 37 57 32 12 22 12 19 20 67 40 157 62 153 37 57 32 12 22 12 19 20 67 40 157 62 153 37 57 32 12 22 12 19 20 67 40 157 62 153 37 57 32 12 22 12 19 20 67 40 157 62 153 37 57 32 12 22 12 19 20 67 40 157 62 153 37 57 32 12 22 12 19 20 67 40 157 62 153 37 57 32 12 22 14 18 31 88 63 88 59 104 68 36 22 28 79 25 18 24 12 19 17 69 60 149 52 21 25 61 26 24 22 22 14 18 31 88 63 88 59 104 68 36 22 22 12 19 23 75 38 117 63 120 66 19 24 22 22 14 18 31 88 63 88 59 104 68 36 22 22 12 25 61 26 24 22 22 14 18 31 88 63 88 59 104 68 36 22 22 24 14 18 31 88 63 88 59 104 68 36 22 22 24 14 18 31 88 63 88 59 104 68 36 29 21 24 22 24 14 20 35 104 71 61 78 79 36 29 21 22 22 14 18 31 88 63 88 59 104 68 36 29 21 24 22 24 14 20 35 104 71 61 78 79 36 29 24 20 27 42 16 30 20 90 83 121 120 61 27 62 20 22 12 19 23 75 38 121 120 61 27 66 19 24 20 27 42 16 30 20 90 83 121 120 61 27 22 20 22 24 14 18 17 20 65 85 121 365 65 20 19 30 34 17 17 70 20 65 85 121 365 65 20 19 30 34 17 17 70 20 663 72 114 247 40 145 18 31 28 17 20 67 63 72 114 247 40 145 18 31 28 17 20 663 72 114 247 40 145 18 31 28 17 20 67 63 72 114 247 40 145 18 31 28 17 20 67 63 72 114 247 40 145 18 31 28 17 72 00 67 63 72 114 247 40 145 18 31 28 17 72 00 67 63 72 114 247 247 4	2	14	22	17	17	20	63	62	53	46	69	36	30
5 19 16 17 18 22 39 72 136 93 38 28 47 6 16 15 19 17 24 38 49 127 120 34 25 34 7 14 15 19 16 31 38 41 116 134 29 25 30 8 18 18 16 18 16 31 39 35 114 117 26 36 29 9 19 14 19 17 35 38 34 82 106 26 36 29 10 24 12 20 18 39 37 35 55 94 20 132 28 11 21 14 20 22 41 38 39 55 47 78 39 255 28 112 21 13 19 22 46 39 55 49 78 36 98 33 13 29 13 20 22 61 42 80 42 104 29 57 40 14 46 13 22 20 70 56 80 40 391 33 59 40 15 63 11 21 14 72 57 88 45 297 55 77 33 16 38 11 19 15 83 76 89 43 193 36 108 26 17 27 10 19 16 68 77 106 48 222 28 79 25 18 24 13 19 17 60 54 183 58 201 27 66 26 19 24 12 19 17 60 54 183 58 201 27 66 26 19 24 12 19 17 60 54 183 58 201 27 66 26 19 24 12 19 20 67 40 157 69 60 149 52 221 25 61 26 19 24 12 19 17 60 54 183 58 201 27 66 26 19 24 12 19 17 60 54 183 58 201 27 66 26 19 24 12 19 17 60 54 183 58 201 27 66 26 20 22 12 19 20 67 40 157 62 153 37 57 32 21 22 12 14 18 31 88 63 88 59 104 68 36 22 22 22 14 18 31 83 63 86 69 30 20 20 24 12 29 20 17 66 60 149 52 221 25 61 26 24 22 22 14 18 31 88 63 88 59 104 68 36 22 23 23 23 15 18 40 107 68 64 67 94 44 31 21 24 22 14 20 35 104 71 61 78 79 36 29 21 25 23 23 15 18 40 107 68 64 67 94 44 31 21 24 22 14 20 35 104 71 61 78 79 36 29 24 25 22 12 16 30 35 104 71 61 78 79 36 29 21 26 28 15 26 20 114 108 114 115 58 29 24 20 27 42 16 30 20 90 83 121 120 61 27 22 20 28 35 18 17 20 65 85 121 365 65 20 19 30 34 17 17 20 66 85 85 121 365 65 20 19 31 28 17 20 67 37 254 254 295 425 427 29 44 18 17 20 67 37 21 14 247 40 145 18 31 28 17 20 67 37 254 259 42 10 27 27 29 29 34 18 17 20 35 60 3530 5070 4750 8390 2590 4000 1770 MAX 63 25 30 40 114 124 183 136 391 98 258 62 MNN 14 10 14 14 20 37 37 34 40 46 20 27 91 18	3	16	19	17	18	20	40	119	52	62	53	34	40
6 16 15 19 17 24 38 49 127 120 34 25 34 25 34 77 144 15 19 16 31 38 41 116 134 29 25 30 8 18 16 18 16 18 16 31 38 41 116 134 29 25 30 8 18 16 18 16 18 16 31 39 35 114 117 26 36 29 9 19 19 14 19 17 35 38 34 82 106 26 83 32 10 24 12 20 18 39 37 35 55 94 20 132 28 11 21 14 20 22 41 38 35 55 49 8 39 255 28 12 21 13 19 22 46 39 55 49 78 39 255 28 12 21 13 29 13 20 22 61 42 80 42 104 29 57 40 14 46 13 22 20 70 56 80 40 391 33 59 40 15 63 11 21 14 72 57 88 45 297 55 77 33 16 38 11 1 21 14 72 57 88 45 297 55 77 33 16 38 11 19 15 83 76 89 43 193 36 108 26 17 27 10 19 15 83 76 89 43 193 36 108 26 17 27 10 19 16 68 77 106 48 222 28 79 25 18 24 13 19 17 69 60 149 52 221 25 61 26 19 24 12 19 17 60 54 183 58 201 27 66 24 20 22 12 19 20 67 40 157 62 153 37 57 32 21 22 12 19 20 67 40 157 62 153 37 57 32 22 22 14 18 31 88 63 88 59 104 68 36 22 22 24 14 18 31 88 63 88 59 104 68 36 22 22 24 14 18 31 88 63 88 59 104 68 36 22 22 24 14 18 31 88 63 88 59 104 68 36 22 22 24 14 20 35 104 71 66 64 67 94 44 31 21 22 22 24 14 20 35 104 71 68 64 67 94 44 31 21 22 22 24 14 20 35 104 71 66 69 93 60 32 25 20 27 42 16 30 20 90 83 121 120 61 27 22 20 22 24 14 20 35 104 71 68 64 67 94 44 31 21 22 22 24 14 20 35 104 71 68 64 67 94 44 31 21 22 22 24 14 20 35 104 71 68 64 67 94 44 31 21 22 22 24 14 20 35 104 71 68 64 67 94 44 31 21 22 22 24 14 20 35 104 71 68 64 67 94 44 31 21 22 22 24 14 20 35 104 71 68 64 67 94 44 31 21 24 22 24 24 16 30 20 90 83 121 120 61 27 22 20 22 24 24 16 30 20 90 83 121 120 61 27 22 20 22 24 24 16 30 20 90 83 121 120 61 27 22 20 20 29 44 18 17 20 65 85 121 365 65 20 19 29 44 18 17 20 65 85 121 365 65 20 19 29 44 18 17 20 65 85 121 365 65 20 19 29 44 18 17 20 65 85 121 365 65 20 19 29 44 18 17 20 65 85 121 365 65 20 19 29 44 18 17 20 65 85 121 365 65 20 19 30 34 17 17 17 20 65 85 121 365 65 20 19 30 34 17 17 17 20 65 85 121 365 65 20 19 30 34 17 17 17 20 65 85 121 365 65 20 19 30 34 17 17 17 20 65 85 121 365 65 20 19 30 34 17 17 17 20 65 85 121 365 65 20 19 30 30 34 17 17 17 20	4	22	17	15	18	22	42	114	73	88	50	29	62
7 14 15 19 16 31 38 41 116 134 29 25 30 8 18 18 16 18 16 31 39 35 114 117 26 36 29 9 19 14 19 17 35 38 34 82 106 26 83 32 10 24 12 20 18 39 37 35 55 94 20 132 28 11 21 14 20 22 41 38 35 54 78 39 255 28 12 21 13 19 22 46 39 55 49 78 36 98 33 13 29 13 20 22 61 42 80 42 104 29 57 40 14 46 13 22 20 70 56 80 40 391 33 59 40 14 46 13 22 20 70 56 80 40 391 33 59 40 15 6 38 11 21 14 72 57 88 45 297 55 77 33 16 38 11 21 14 72 57 88 45 297 55 77 33 16 38 11 19 19 16 68 77 106 48 222 28 79 25 18 24 13 19 17 69 60 149 52 221 25 61 26 19 24 12 19 17 60 54 183 58 201 27 55 62 61 26 19 24 12 19 17 60 54 183 58 201 27 66 24 20 22 12 19 23 75 38 117 63 120 22 22 12 19 20 67 40 157 62 153 37 57 32 21 22 12 19 20 67 40 157 62 153 37 57 32 21 22 12 19 23 75 38 117 63 120 66 19 24 22 22 14 18 31 88 63 88 59 104 68 36 24 22 22 14 18 31 88 63 88 59 104 68 36 22 24 22 14 20 35 104 71 61 78 79 44 41 31 21 24 20 35 104 71 61 78 79 44 41 31 21 24 20 35 104 71 61 78 79 36 29 21 25 20 22 14 20 35 104 71 61 78 79 36 29 21 25 20 22 14 20 35 104 71 61 78 79 36 29 21 25 22 28 79 21 25 26 28 15 26 20 114 108 114 108 114 111 58 29 24 20 24 22 14 20 35 104 71 61 78 79 36 29 21 24 22 14 20 35 104 71 61 78 79 36 29 21 25 20 26 28 15 26 20 114 108 114 108 114 111 58 29 24 20 27 42 16 30 20 90 83 121 120 61 27 62 20 22 21 21 19 20 35 104 71 61 78 79 36 29 21 25 20 28 35 18 17 20 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 20 20 28 35 18 17 20 72 72 102 121 190 75 22 19 20 20 28 35 18 17 20 72 72 102 121 190 75 22 19 20 44 18 17 20 72 72 102 121 190 75 22 19 20 12 20 20 22 12 10 19 17 20 72 72 102 121 190 75 22 19 20 24 20 27 42 16 30 32 00 34 17 17 20 72 72 102 121 190 75 22 19 20 19 30 34 17 17 20 72 72 72 102 121 190 75 22 19 30 34 17 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 17 20 72 72 102 121 190 75 22 19 30 30 34 17 17 70 70 72 72 72 102 121 190 75 22 19 30 30 34 17 17 17 20 72 72	5	19	16	17	18	22	39	72	136	93	38	28	47
8 18 16 16 18 16 31 39 35 114 117 26 36 29 9 19 19 14 19 17 35 38 34 82 106 26 83 32 10 24 12 20 18 39 37 35 55 94 20 132 28 11 21 14 20 22 41 38 35 55 49 78 36 29 12 21 13 19 22 46 39 55 49 78 36 98 33 13 29 13 20 22 61 42 80 42 104 29 57 40 14 46 13 22 20 70 56 80 40 391 33 59 40 15 63 11 21 14 72 57 88 45 297 55 77 33 16 38 11 19 15 83 76 89 43 193 36 108 26 17 27 10 19 16 68 77 106 48 222 28 79 25 18 24 13 19 17 69 60 149 52 221 25 61 26 19 24 12 19 17 69 60 149 52 221 25 61 26 19 24 12 19 17 69 60 149 52 221 25 61 26 19 24 12 19 20 67 40 157 62 153 37 57 32 21 22 12 19 20 67 40 157 62 153 37 57 32 21 22 12 19 20 67 40 157 62 153 37 57 32 21 22 12 19 23 75 38 117 63 120 66 19 24 20 22 12 19 18 80 107 68 64 67 94 44 31 21 21 22 12 19 18 80 107 68 64 67 94 44 31 21 22 22 14 18 31 88 63 88 59 104 68 36 22 23 23 15 18 40 107 68 64 67 97 44 44 31 21 24 22 22 14 18 31 88 63 88 59 104 68 36 22 23 23 15 18 40 107 68 64 67 97 44 44 31 21 25 23 15 26 20 114 108 114 108 114 115 8 29 24 26 28 15 26 20 114 108 114 108 114 115 8 29 24 27 42 16 30 20 90 83 121 120 61 27 22 20 28 35 18 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 73 55.6 57.4 85.1 77.3 141 42.2 65.1 29.8 30 34 37 180 1250 3260 3530 5070 4750 8390 2590 4000 1770 30 30 34 17 17 17 20 72 72 102 121 190 75 22 19 30 34 17 17 17 20 73 36 65 57.4 85.1 77.3 141 42.2 65.1 29.8 31 10 10 14 14 12 12 12 14 18 3 136 391 298 258 65 12 106 12 12 12 12 12 12 12 12 12 12 12 12 12	6	16	15	19	17	24	38	49	127	120	34	25	34
9 19 14 19 17 35 38 34 82 106 26 83 32 10 24 12 20 18 39 37 35 55 94 20 132 28 11 21 14 20 22 41 38 35 55 94 20 132 28 12 21 13 19 22 46 39 55 49 78 36 98 33 13 29 13 20 22 61 42 80 42 104 29 57 40 14 46 13 22 20 70 56 80 40 391 33 59 40 15 63 11 21 14 72 57 88 45 297 55 77 33 16 38 11 19 15 83 76 89 43 193 36 108 26 17 27 10 19 16 68 77 106 48 222 28 79 25 18 24 13 19 17 60 68 77 106 48 222 28 79 25 18 24 13 19 17 60 54 183 58 201 27 66 24 20 22 12 19 23 75 38 117 63 120 66 19 24 21 22 12 19 23 75 38 117 63 120 66 19 24 22 22 14 18 31 88 63 88 59 104 68 86 22 23 23 15 18 40 107 68 64 67 79 44 44 31 21 24 22 14 20 35 104 71 61 78 79 36 22 25 26 28 15 26 20 114 108 114 115 58 29 21 25 23 23 15 18 40 107 68 64 67 94 44 31 21 24 22 14 20 35 104 71 61 78 79 36 25 20 26 28 15 26 20 114 108 107 68 64 67 94 44 31 21 24 22 14 20 35 104 71 61 78 79 36 29 21 25 23 23 15 18 40 107 68 64 67 94 44 31 21 24 22 14 20 35 104 71 61 78 79 36 29 21 25 23 25 25 20 26 28 15 26 20 114 108 114 108 114 111 58 29 24 20 27 42 16 30 20 90 83 121 120 66 12 72 22 28 35 18 17 20 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 30 34 17 17 20 7 65 85 121 365 65 20 19 30 34 17 17 20 7 65 85 121 365 65 20 19 30 34 17 17 20 7 65 85 121 365 65 20 19 30 34 17 17 20 7 65 85 121 365 65 20 19 30 34 17 17 20 7 65 85 121 365 65 20 19 30 34 17 17 20 7 65 85 121 365 65 20 19 30 34 17 17 20 7 65 85 121 365 65 20 19 30 34 17 17 20 3 65 85 121 365 65 20 19 30 34 17 17 20 3 65 85 121 365 65 20 19 30 34 17 17 20 3 65 85 121 365 65 20 19 30 34 17 17 20 3 65 85 121 365 65 20 19 30 34 17 17 20 3 65 85 121 365 65 20 19 30 34 17 17 20 3 65 85 121 365 65 20 19 30 34 17 17 20 3 65 85 121 365 65 20 19 30 34 17 17 20 3 3 630 1642 1779 2554 2395 4231 1307 2017 894 8AN 63 25 30 40 114 124 183 136 391 98 258 62 31 31 30 40 14 14 124 183 136 391 98 258 66 31 31 32 34 34 34 34 34 44 44 44 44 44 44 44 44	7	14	15	19	16	31	38	41	116	134	29	25	30
10	8	18	16	18	16	31	39	35	114	117	26	36	29
11 21 14 20 22 41 38 35 54 78 39 255 28 12 21 13 19 22 46 39 55 49 78 36 98 33 13 29 13 20 22 61 42 80 42 104 29 57 40 14 46 13 22 20 70 56 80 40 391 33 59 40 15 63 11 21 14 72 57 88 45 297 55 77 33 16 38 11 19 15 83 76 89 43 193 36 108 26 17 27 10 19 16 68 77 106 48 222 28 79 25 18 24 13 19 17 69 60 149 52 221 25 61 26 19 24 12 19 17 60 54 183 58 201 27 66 24 20 22 12 19 20 67 40 157 62 153 37 57 32 21 22 12 19 20 67 40 157 62 153 37 57 32 21 22 12 19 23 75 38 117 63 120 66 19 24 22 22 14 18 31 88 63 88 59 104 68 36 22 23 23 23 15 18 40 107 68 64 64 67 94 44 31 21 24 22 14 20 35 104 71 61 78 79 36 29 21 25 23 15 22 24 91 124 66 93 60 32 25 20 26 28 15 26 20 114 108 114 115 88 29 24 27 42 16 30 20 90 83 121 120 61 27 22 20 28 8 15 26 20 114 108 114 115 82 9 24 29 24 16 30 20 90 83 121 120 61 27 22 20 20 22 14 18 10 17 69 60 60 60 93 60 32 25 20 26 28 15 26 20 114 108 114 108 114 111 58 29 24 29 24 16 30 20 90 83 121 120 61 27 22 20 27 42 16 30 20 90 83 121 120 61 27 22 20 28 35 18 17 20 65 85 121 365 65 20 19 30 34 17 17 20 65 85 121 365 65 20 19 30 34 17 17 20 65 85 121 365 65 20 19 30 34 17 17 20 65 85 121 365 65 20 19 30 34 17 17 20 67 85 85 121 365 65 20 19 30 34 17 17 20 67 85 85 121 365 65 20 19 30 34 17 17 20 67 85 85 121 365 65 20 19 31 28 17 20 67 85 85 121 365 65 20 19 31 28 35 18 17 20 35 8.6 57.4 85.1 77.3 141 42.2 65.1 29.8 AC-FT 1620 887 1180 1250 3260 3530 5070 4750 8390 2590 4000 1770 MAX 63 25 30 40 114 124 18 13 136 391 98 258 62 MIN 14 10 14 10 14 14 20 37 34 40 46 20 19 18	9	19	14	19	17	35	38	34	82	106	26	83	32
12 21 13 19 22 46 39 55 49 78 36 98 33 13 29 13 20 22 61 42 80 42 104 29 57 40 14 46 13 22 20 70 56 80 40 391 33 59 40 15 63 11 21 14 72 57 88 45 297 55 77 33 16 38 11 19 15 83 76 89 43 193 36 108 26 17 27 10 19 16 68 77 106 48 222 28 79 25 18 24 13 19 17 69 60 149 52 221 25 61 26 19 24 12 19 17 60 54 183 58 201 27 66 24 20 22 12 19 20 67 40 157 62 153 37 57 32 21 22 12 19 20 67 40 157 62 153 37 57 32 21 22 12 19 23 75 38 117 63 120 66 19 24 22 22 24 14 18 31 88 63 88 59 104 68 36 22 22 22 24 91 24 18 31 88 63 88 59 104 68 36 22 23 22 24 14 18 31 88 63 88 59 104 68 36 22 23 23 15 18 40 107 68 64 67 94 44 31 21 24 22 14 20 35 104 71 61 78 79 36 29 21 25 22 24 91 124 66 93 60 32 25 20 21 25 20 21 24 91 124 66 93 60 32 25 20 22 26 28 15 22 24 91 124 66 93 60 32 25 20 26 28 15 26 20 114 108 114 108 114 111 58 29 24 20 27 42 16 30 20 90 83 121 120 61 27 22 20 20 28 35 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 72 102 121 190 75 22 19 29 44 18 17 17 20 72 72 72 102 121 190 75 22 19 20 24 20 20 20 20 20 20 20 20 20 20 20 20 20	10	24	12	20	18	39	37	35	55	94	20	132	28
13	11	21	14	20		41	38				39		
14 46 13 22 20 70 70 56 80 40 391 33 59 40  15 63 11 21 14 72 57 88 45 297 55 77 33  16 38 11 19 15 83 76 89 43 193 36 108 26  17 27 10 19 16 68 77 106 48 222 28 79 25  18 24 13 19 17 69 60 149 52 221 25 61 26  19 24 12 19 17 60 54 183 58 201 27 66 24  20 22 12 19 20 67 40 157 62 153 37 57 32  21 22 12 19 23 75 38 117 63 120 66 19 24  22 22 14 18 31 88 63 88 59 104 68 36 22  23 23 15 18 40 107 68 64 67 94 44 31 21  24 22 21 4 20 35 104 71 61 78 79 36 29 21  25 23 23 15 22 24 91 124 66 93 60 32 25  26 28 15 26 20 114 108 114 108 114 115 88 29 24  27 42 16 30 20 90 83 121 120 61 27 22 20  28 35 18 17 20 72 72 102 121 190 75 22 19  29 44 18 17 20 72 72 102 121 190 75 22 19  29 44 18 17 20 72 72 102 121 190 75 22 19  20 21 22 16 630 20 90 83 121 120 61 27 22 20  28 35 18 17 20 72 72 102 121 190 75 22 19  29 44 18 17 20 72 72 102 121 190 75 22 19  29 44 18 17 20 72 72 102 121 190 75 22 19  29 44 18 17 20 72 72 102 121 190 75 22 19  20 34 17 17 20 65 85 121 365 65 20 19  30 34 17 17 20 65 85 121 365 65 20 19  30 34 17 17 20 65 85 121 365 65 20 19  31 28 17 20 65 85 121 365 65 20 19  MEAN 26.3 14.9 19.1 20.3 58.6 57.4 85.1 77.3 141 42.2 65.1 29.8  AC-FT 1620 887 1180 1250 3260 3500 5700 4750 8390 2590 4000 1770  MAX 63 25 30 40 114 124 183 136 391 98 258 62  MIN 14 10 14 10 14 14 20 37 34 40 46 20 19 18	12	21	13	19	22	46	39	55	49	78	36	98	33
15 63 11 21 14 72 57 88 45 297 55 77 33 16 38 11 19 15 83 76 89 43 193 36 108 26 17 27 10 19 16 68 77 106 48 222 28 79 25 18 24 13 19 17 69 60 149 52 221 25 61 26 19 24 12 19 17 60 54 183 58 201 27 66 24 19 22 12 19 20 67 40 157 62 153 37 57 32 11 22 12 19 23 75 38 117 63 120 66 19 24 22 22 14 18 31 88 63 88 59 104 68 36 22 23 23 15 18 40 107 68 64 67 94 44 31 21 21 24 22 14 20 35 104 71 61 78 79 36 29 21 25 22 24 21 24 20 25 23 15 22 24 91 124 66 93 60 32 25 20 26 28 15 26 20 114 108 114 111 58 29 24 20 26 28 15 26 20 114 108 114 111 58 29 24 20 27 42 16 30 20 90 83 121 120 61 27 22 20 22 20 24 18 17 20 65 85 121 365 65 20 19 30 34 17 17 20 65 85 121 365 65 20 19 30 30 34 17 17 20 65 85 121 365 65 20 19 30 30 34 17 17 20 65 85 121 365 65 20 19 30 30 34 17 17 20 30 30 36 30 30 30 30 30 30 30 30 30 30 30 30 30	13	29	13	20	22	61	42	80	42	104	29	57	40
16       38       11       19       15       83       76       89       43       193       36       108       26         17       27       10       19       16       68       77       106       48       222       28       79       25         18       24       13       19       17       69       60       149       52       221       25       61       26         19       24       12       19       17       60       54       183       58       201       27       66       24         20       22       12       19       20       67       40       157       62       153       37       57       32         21       22       12       19       23       75       38       117       63       120       66       19       24         22       22       14       18       31       88       63       88       59       104       68       36       22         23       23       15       18       40       107       68       64       67       94       44       31       21 </td <td>14</td> <td>46</td> <td>13</td> <td>22</td> <td>20</td> <td>70</td> <td>56</td> <td>80</td> <td>40</td> <td>391</td> <td>33</td> <td>59</td> <td>40</td>	14	46	13	22	20	70	56	80	40	391	33	59	40
17 27 10 19 16 68 77 106 48 222 28 79 25 18 24 13 19 17 69 60 149 52 221 25 61 26 19 24 12 19 17 60 54 183 58 201 27 66 24 20 22 12 19 20 67 40 157 62 153 37 57 32 21 22 12 19 23 75 38 117 63 120 66 19 24 22 22 14 18 31 88 63 88 59 104 68 36 22 23 23 15 18 40 107 68 64 67 94 44 31 21 24 22 14 20 35 104 71 61 78 79 36 29 21 25 23 15 22 24 91 124 66 93 60 32 25 20 26 28 15 26 20 114 108 114 111 58 29 24 20 27 42 16 30 20 90 83 121 120 61 27 22 20 28 35 18 17 20 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 102 121 190 75 22 19 30 34 17 17 20 65 85 121 365 65 20 19 30 34 17 17 20 65 85 121 365 65 20 19 31 28 17 20 47 89 37 258  TOTAL 816 447 593 630 1642 1779 2554 2395 4231 1307 2017 894 MEAN 26.3 14.9 19.1 20.3 58.6 57.4 85.1 77.3 141 42.2 65.1 29.8 MIN 14 10 14 14 20 37 34 40 46 20 19 18  CAL YR 2006 TOTAL 12472 MEAN 34.2 MAX 463 MIN 0.8 AC-FT 24700	15	63	11	21	14	72	57	88	45	297	55	77	33
18     24     13     19     17     69     60     149     52     221     25     61     26       19     24     12     19     17     60     54     183     58     201     27     66     24       20     22     12     19     20     67     40     157     62     153     37     57     32       21     22     12     19     23     75     38     117     63     120     66     19     24       22     22     14     18     31     88     63     88     59     104     68     36     22       23     23     15     18     40     107     68     64     67     94     44     31     21       24     22     14     20     35     104     71     61     78     79     36     29     21       25     23     15     22     24     91     124     66     93     60     32     25     20       26     28     15     26     20     114     108     114     111     58     29     24     20       27 <td>16</td> <td>38</td> <td>11</td> <td>19</td> <td>15</td> <td>83</td> <td>76</td> <td>89</td> <td>43</td> <td></td> <td>36</td> <td>108</td> <td></td>	16	38	11	19	15	83	76	89	43		36	108	
19	17	27	10	19	16	68	77	106	48		28	79	25
20	18	24	13	19	17	69	60	149	52	221	25	61	26
21	19					60	54					66	
22 22 14 18 31 88 63 88 59 104 68 36 22 23 23 15 18 40 107 68 64 67 94 44 31 21 24 22 14 20 35 104 71 61 78 79 36 29 21 25 23 15 22 24 91 124 66 93 60 32 25 20 26 28 15 26 20 114 108 114 111 58 29 24 20 27 42 16 30 20 90 83 121 120 61 27 22 20 28 35 18 17 20 72 72 102 121 190 75 22 19 29 44 18 17 20 65 85 121 365 65 20 19 30 34 17 17 20 65 85 121 365 65 20 19 30 34 17 17 20 63 72 114 247 40 145 18 31 28 17 20 47 89 37 258  TOTAL 816 447 593 630 1642 1779 2554 2395 4231 1307 2017 894 MEAN 26.3 14.9 19.1 20.3 58.6 57.4 85.1 77.3 141 42.2 65.1 29.8 AC-FT 1620 887 1180 1250 3260 3530 5070 4750 8390 2590 4000 1770 MAX 63 25 30 40 114 124 183 136 391 98 258 62 MIN 14 10 14 14 12 20 37 34 40 46 20 19 18	20			19	20	67	40	157	62		37	57	
23 23 15 18 40 107 68 64 67 94 44 31 21 24 22 14 20 35 104 71 61 78 79 36 29 21 25 23 15 22 24 91 124 66 93 60 32 25 20 26 28 15 26 20 114 108 114 111 58 29 24 20 27 42 16 30 20 90 83 121 120 61 27 22 20 28 35 18 17 20 72 72 102 121 190 75 22 19 29 44 18 17 20 72 72 102 121 190 75 22 19 29 44 18 17 20 65 85 121 365 65 20 19 30 34 17 17 20 65 85 121 365 65 20 19 30 34 17 17 20 63 72 114 247 40 145 18 31 28 17 20 47 89 37 258   TOTAL 816 447 593 630 1642 1779 2554 2395 4231 1307 2017 894 MEAN 26.3 14.9 19.1 20.3 58.6 57.4 85.1 77.3 141 42.2 65.1 29.8 AC-FT 1620 887 1180 1250 3260 3530 5070 4750 8390 2590 4000 1770 MAX 63 25 30 40 114 124 183 136 391 98 258 62 MIN 14 10 14 14 12 20 37 34 40 46 20 19 18													
24     22     14     20     35     104     71     61     78     79     36     29     21       25     23     15     22     24     91     124     66     93     60     32     25     20       26     28     15     26     20     114     108     114     111     58     29     24     20       27     42     16     30     20     90     83     121     120     61     27     22     20       28     35     18     17     20     72     72     102     121     190     75     22     19       29     44     18     17     20      65     85     121     365     65     20     19       30     34     17     17     20      63     72     114     247     40     145     18       31     28      17     20      47      89      37     258        TOTAL     816     447     593     630     1642     1779     2554     2395     4231     1307     2017     894	22	22	14	18	31	88	63	88			68	36	22
25													
26	24	22	14	20	35	104	71				36		
27     42     16     30     20     90     83     121     120     61     27     22     20       28     35     18     17     20     72     72     102     121     190     75     22     19       29     44     18     17     20      65     85     121     365     65     20     19       30     34     17     17     20      63     72     114     247     40     145     18       31     28      17     20      47      89      37     258        TOTAL     816     447     593     630     1642     1779     2554     2395     4231     1307     2017     894       MEAN     26.3     14.9     19.1     20.3     58.6     57.4     85.1     77.3     141     42.2     65.1     29.8       AC-FT     1620     887     1180     1250     3260     3530     5070     4750     8390     2590     4000     1770       MAX     63     25     30     40     114     124     183     136	25		15	22	24	91	124	66	93	60	32	25	20
28													
29       44       18       17       20        65       85       121       365       65       20       19         30       34       17       17       20        63       72       114       247       40       145       18         31       28        17       20        47        89        37       258          TOTAL       816       447       593       630       1642       1779       2554       2395       4231       1307       2017       894         MEAN       26.3       14.9       19.1       20.3       58.6       57.4       85.1       77.3       141       42.2       65.1       29.8         AC-FT       1620       887       1180       1250       3260       3530       5070       4750       8390       2590       4000       1770         MAX       63       25       30       40       114       124       183       136       391       98       258       62         MIN       14       10       14       14       20       37       34       40 <td></td>													
30 34 17 17 20 63 72 114 247 40 145 18 31 28 17 20 47 89 37 258   TOTAL 816 447 593 630 1642 1779 2554 2395 4231 1307 2017 894 MEAN 26.3 14.9 19.1 20.3 58.6 57.4 85.1 77.3 141 42.2 65.1 29.8 AC-FT 1620 887 1180 1250 3260 3530 5070 4750 8390 2590 4000 1770 MAX 63 25 30 40 114 124 183 136 391 98 258 62 MIN 14 10 14 14 12 20 37 34 40 46 20 19 18 CAL YR 2006 TOTAL 12472 MEAN 34.2 MAX 463 MIN 0.8 AC-FT 24700						72							
31 28 17 20 47 89 37 258  TOTAL 816 447 593 630 1642 1779 2554 2395 4231 1307 2017 894  MEAN 26.3 14.9 19.1 20.3 58.6 57.4 85.1 77.3 141 42.2 65.1 29.8  AC-FT 1620 887 1180 1250 3260 3530 5070 4750 8390 2590 4000 1770  MAX 63 25 30 40 114 124 183 136 391 98 258 62  MIN 14 10 14 14 20 37 34 40 46 20 19 18  CAL YR 2006 TOTAL 12472 MEAN 34.2 MAX 463 MIN 0.8 AC-FT 24700											65		
TOTAL 816 447 593 630 1642 1779 2554 2395 4231 1307 2017 894 MEAN 26.3 14.9 19.1 20.3 58.6 57.4 85.1 77.3 141 42.2 65.1 29.8 AC-FT 1620 887 1180 1250 3260 3530 5070 4750 8390 2590 4000 1770 MAX 63 25 30 40 114 124 183 136 391 98 258 62 MIN 14 10 14 14 12 0 37 34 40 46 20 19 18 CAL YR 2006 TOTAL 12472 MEAN 34.2 MAX 463 MIN 0.8 AC-FT 24700			17					72		247			18
MEAN 26.3 14.9 19.1 20.3 58.6 57.4 85.1 77.3 141 42.2 65.1 29.8 AC-FT 1620 887 1180 1250 3260 3530 5070 4750 8390 2590 4000 1770 MAX 63 25 30 40 114 124 183 136 391 98 258 62 MIN 14 10 14 14 12 20 37 34 40 46 20 19 18 CAL YR 2006 TOTAL 12472 MEAN 34.2 MAX 463 MIN 0.8 AC-FT 24700	31	28		17	20		47		89		37	258	
AC-FT 1620 887 1180 1250 3260 3530 5070 4750 8390 2590 4000 1770 MAX 63 25 30 40 114 124 183 136 391 98 258 62 MIN 14 10 14 14 20 37 34 40 46 20 19 18 CAL YR 2006 TOTAL 12472 MEAN 34.2 MAX 463 MIN 0.8 AC-FT 24700													
MAX 63 25 30 40 114 124 183 136 391 98 258 62 MIN 14 10 14 14 20 37 34 40 46 20 19 18 CAL YR 2006 TOTAL 12472 MEAN 34.2 MAX 463 MIN 0.8 AC-FT 24700													
MIN 14 10 14 14 20 37 34 40 46 20 19 18  CAL YR 2006 TOTAL 12472 MEAN 34.2 MAX 463 MIN 0.8 AC-FT 24700													
CAL YR 2006 TOTAL 12472 MEAN 34.2 MAX 463 MIN 0.8 AC-FT 24700													
	MIN	14	10	14	14	20	37	34	40	46	20	19	18
	CAL YR	2006	TOTAL	12472	MEAN	34.2 MAX	46	3 MIN	0.8	AC-FT	24700		
WIN IN 2007 TOTAL 19000 THEM OL. 9 THEN SOI HIM TO MO IT 50290	WTR YR		TOTAL			52.9 MAX					38290		

MAX DISCH: 704 CFS AT 20:15 ON Aug. 30, 2007 GH 4.13 FT. SHIFT +0.04 FT. MAX GH: 4.13 FT. AT 20:15 ON Aug. 30, 2007

# 07126500 PURGATOIRE RIVER AT NINEMILE DAM NEAR HIGBEE CO (RIVER ONLY) WY2007 HYDROGRAPH



07126500 NINEMILE CANAL BELOW NINEMILE DAM NEAR HIGBEE, CO.

LOCATION.--Lat 37°42'53", long 103°30'38", in NW4 sec. 7, T.27 S., R.54 W., Otero County.

DRAINAGE AREA. --N/A

13.52

. 44

2.7

4.0

TOTAL.

MEAN

AC-FT

CAL YR 2006

WTR YR 2007

MAX

MTN

GAGE.--Float-activated graphic water-stage recorder, SDI shaft encoder, and a High Data Rate Sutron SatLink DCP in a 3 ft by 3 ft steel shelter with well. Primary record is DCP data log with satellite-monitored data and the graphic chart recorder used for backup purposes. Six-foot standard concrete Parshall flume is the control. Primary reference gage is outside staff gage installed in flume.

REMARKS.--Record is complete and reliable, except for the periods: Oct 29-Nov 29, 2006, Mar. 20-May 11, May 16-June 14, June 21-28, July 8-10, 2007, when the measuring flume was submerged due to a downstream check dam used to back up water for lift pumps and due to poorly maintained channel conditions downstream of the measuring flume; Nov 30, Dec 1-31, 2006, Jan 1-31, Feb 1-7, 2007, when the stage-discharge relationship was affected by ice (ice was chopped out of well on Feb 7, 2007, and well stayed clear of ice for the remainder of the water year); Feb 24, Mar 9, 2007, when flow was estimated because gage height was not representative of average for the day (problem was caused by water in well dropping below zero); Jul 11-31, Aug 1-9, 2007, when the stilling well was filled with mud above lower intake and floats were stuck on mud. Record is poor, due to long periods of ice effect, recorded negative gage heights, submerged flume conditions, and floats sitting on mud in the well. Station maintained and record developed by A. Adame.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

RATING TABLE. -- NMCHIGCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	3.0	2.0	2.0	1.0	0	1.0	1.0	1.0	14	.20	19
2	.16	3.0	2.0	2.0	1.0	0	1.0	1.0	1.0	14	.18	18
3	.14	3.0	2.0	1.5	1.0	0	1.0	1.0	1.0	13	.15	11
4	.14	3.0	2.0	1.5	1.0	0	1.0	1.0	1.0	13	.10	.44
5	.14	2.0	2.0	1.5	1.0	0	1.0	1.0	1.0	13	.10	.38
6	.14	2.0	2.0	1.5	1.0	0	1.0	1.0	1.0	13	.10	.35
7	.11	2.0	2.0	1.5	1.0	0	1.0	1.0	1.0	12	.10	.31
8	.09	2.0	2.0	1.5	.73	.02	1.0	1.0	1.0	2.0	.10	.27
9	.09	2.0	2.0	1.5	.67	.03	1.0	1.0	1.0	2.0	.10	.21
10	.09	2.0	2.0	1.5	.59	.05	1.0	1.0	1.0	2.0	.98	.19
11	.08	2.0	2.0	1.5	.43	.08	1.0	1.0	1.0	.20	.75	.14
12	.05	2.0	2.0	1.5	.27	.09	1.0	1.0	1.0	.20	.54	.10
13	.05	2.0	2.0	1.5	.22	.13	1.0	1.0	1.0	.20	.52	.09
14	.03	2.0	2.0	1.5	.20	.12	1.0	.97	1.0	.20	.45	.06
15	.03	2.0	2.0	1.5	.20	.16	1.0	.93	11	.20	.47	.05
16	.01	2.0	2.0	1.5	.19	.15	1.0	1.0	9.5	.20	.52	.04
17	0	2.0	2.0	1.5	.10	.20	1.0	1.0	9.7	.20	.52	.07
18	0	2.0	2.0	1.5	.02	.23	1.0	1.0	9.4	.20	.50	.33
19	0	2.0	2.0	1.5	0	1.1	1.0	1.0	9.4	.20	.53	.27
20	0	2.0	2.0	1.5	0	1.0	1.0	1.0	8.8	.20	6.5	.27
21	0	2.0	2.0	1.0	0	1.0	1.0	1.0	4.0	.20	16	.30
22	0	2.0	2.0	1.0	0	1.0	1.0	1.0	4.0	.20	6.4	.48
23	0	2.0	2.0	1.0	0	1.0	1.0	1.0	4.0	.20	.62	.52
24	0	2.0	2.0	1.0	0	1.0	1.0	1.0	4.0	.20	.52	.52
25	0	2.0	2.0	1.0	0	1.0	1.0	1.0	4.0	.20	.47	.52
26	0	2.0	2.0	1.0	0	1.0	1.0	1.0	4.0	.20	.43	.52
27	0	2.0	2.0	1.0	0	1.0	1.0	1.0	4.0	.20	.38	.52
28	0	2.0	2.0	1.0	0	1.0	1.0	1.0	9.0	.20	.35	.53
29	4.0	2.0	2.0	1.0		1.0	1.0	1.0	18	.20	.33	.53
30	4.0	2.0	2.0	1.0		1.0	1.0	1.0	16	.20	.32	.52
31	4.0		2.0	1.0		1.0		1.0		.20	5.8	

14.36

.46

2.8

Ω

1.1

30.0

1.00

60

1.0

1.0

36 MIN

19 MIN

30.90

1.00

61

1.0

.93

142.8

4.76

283

1.8

1.0

0 AC-FT

0 AC-FT

102.20

3.30

203

14

.20

5580

1220

45.03

1.45

89

16

.10

56.53

1.88

112

19

. 04

MAX DISCH: 89.9 CFS AT 17:45 ON Aug.31, 2007 GH 0.89 FT. SHIFT 0 FT. MAX GH: 0.89 FT. AT 17:45 ON Aug.31, 2007

42.0

1.35

8.3

2.0

1.0

10.62

.38

7.71 MAX

1.68 MAX

21

0

1.0

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

62.0

2.00

123

2.0

2.0

613.96 MEAN

TOTAL 2813.99 MEAN

64.0

2.13

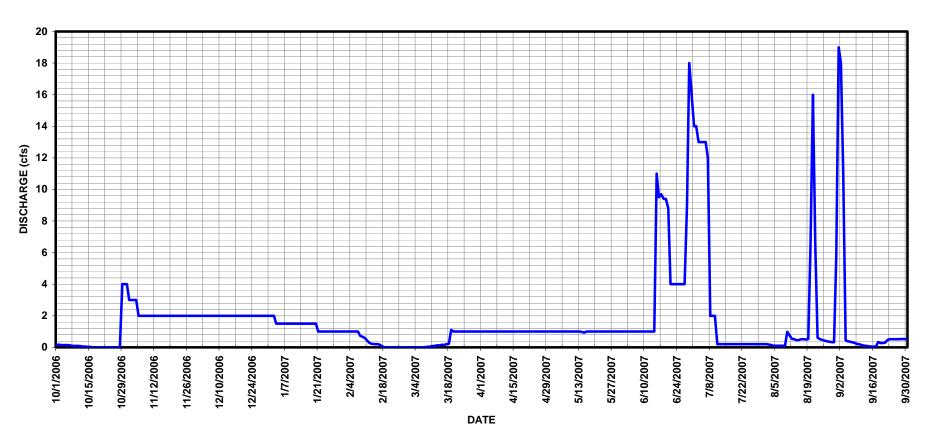
127

3.0

2.0

TOTAL

# 07126500 NINEMILE CANAL BELOW NINEMILE DAM NEAR HIGBEE CO WY2007 HYDROGRAPH



#### 07126500 PURGATOIRE RIVER AT NINEMILE DAM NEAR HIGBEE, CO (COMBINED)

LOCATION.--Lat 37°42'53", long 103°30'38", in NW4 sec. 7, T.27 S., R.54 W., Otero County, Hydrologic Unit 11020010, on left bank at Ninemile Dam, 4 mi southwest of Higbee, and 5.5 mi upstream from Smith Canyon. Prior to Apr. 21, 1978 gage located 850 ft, upstream.

DRAINAGE AREA. -- 2,752 mi<sup>2</sup>.

REMARKS.--The combined record of discharges was obtained by the addition of daily flows from the Ninemile Canal to the corresponding daily flows in the Purgatoire River at Ninemile Dam. The peak discharge for the water year was 705 cfs at 2015 on August 30, 2007. Combined record is poor due to numerous problems at the river gage and the canal gage throughout WY2007 and due to the fact that flows over 500 cfs cannot be measured at the river gage. See individual PURNINCO and NMCHIGCO records for more details. Record developed by Div. II Hydrographic Staff.

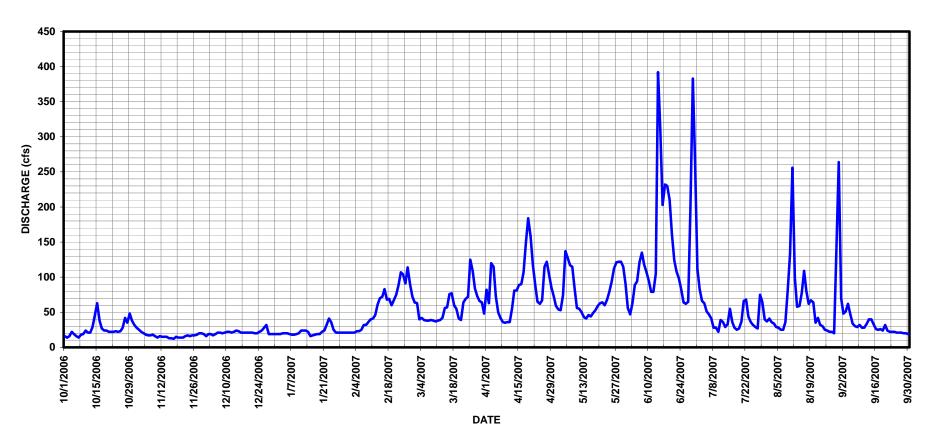
PURGATOIRE RIVER AT NINEMILE DAM AND NINEMILE CANAL NEAR HIGBEE CO (COMBINED)

			DIS	CHARGE, I	N CFS, WATE	R YEAR OO AN VALUES		006 TO SE	PTEMBER 2	007		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	28	16	19	21	64	82	59	56	112	41	70
2	14	25	19	19	21	63	63	54	47	83	36	48
3	16	22	19	20	21	40	120	53	63	66	34	51
4	22	20	17	20	23	42	115	74	89	63	29	62
5	19	18	19	20	23	39	73	137	94	51	28	47
6	16	17	21	19	25	38	50	128	121	47	25	34
7	14	17	21	18	32	38	42	117	135	41	25	30
8	18	18	20	18	32	39	36	115	118	28	36	29
9	19	16	21	19	36	38	35	83	107	28	83	32
10	24	14	22	20	40	37	36	56	95	22	133	28
11	21	16	22	24	41	38	36	55	79	39	256	28
12	21	15	21	24	46	39	56	50	79	36	99	33
13	29	15	22	24	61	42	81	43	105	29	58	40
14	46	15	24	22	70	56	81	41	392	33	59	40
15	63	13	23	16	72	57	89	46	308	55	77	33
16	38	13	21	17	83	76	90	44	203	36	109	26
17	27	12	21	18	68	77	107	49	232	28	80	25
18	24	15	21	19	69	60	150	53	230	25	62	26
19	24	14	21	19	60	55	184	59	210	27	67	24
20	22	14	21	22	67	41	158	63	162	37	64	32
21	22	14	21	24	75	39	118	64	124	66	35	24
22	22	16	20	32	88	64	89	60	108	68	42	22
23	23	17	20	41	107	69	65	68	98	44	32	22
24	22	16	22 24	36 25	104 91	72 125	62	79	83 64	36 32	30 25	22
25 26	23 28	17 17	24	25	114	109	67 115	94 112	62	32 29	23	21 21
27	42	18	32	21	90	84	122	121	65	29	22	21
28	35	20	19	21	72	73	103	121	199	75	22	20
29	48	20	19	21		66	86	122	383	65	20	20
30	38	19	19	21		64	73	115	263	40	145	19
31	32		19	21		48		90	203	37	264	
31	52		10	21		40		30		37	204	
TOTAL	828	511	655	681	1652	1792	2584	2426	4374	1405	2062	950
MEAN	27	17	21	22	59	58	86	78	146	45	67	32
AC-FT	1640	1010	1300	1350	3280	3550	5130	4810	8680	2790	4090	1880
MAX	63	28	32	41	114	125	184	137	392	112	264	70
MIN	14	12	16	16	21	37	35	41	47	22	20	19
CAL YR	2006	TOTAL	12610	MEAN	34.6 MAX	463	3 MIN	0.8	AC-FT	25000		
WTR YR	2007	TOTAL		MEAN	54.6 MAX	392			AC-FT AC-FT	39510		
M T I / T I/	2001	TOTUL	10020	1 111/211/	01.0 mm	332	- 1.1 T I A	+ 2	110 11	33310		

MAX DISCHARGE: 705 CFS AT 20:15 ON Aug. 30, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 07126500 PURGATOIRE RIVER AT NINEMILE DAM AND NINEMILE CANAL NEAR HIGBEE CO (COMBINED) WY2007 HYDROGRAPH



#### PURGATOIRE RIVER BELOW HIGHLAND DAM NEAR LAS ANIMAS, CO

LOCATION.--Lat 37°54′03″, Long 103°17′56″ (Hackamore Ranch, CO Quadrangle, Scale 1:24,000), NE1/4, SW1/4, Section 1, T25S, R53W. On the left bank approximately 4 mile downstream of the Highland Canal Diversion Dam, Bent County, 11 mi southwest of Las Animas, Colorado.

DRAINAGE AREA. --N/A.

GAGE. -- Sutron Accubar water level sensor and satellite-monitored data collection platform (High data rate Sutron 8210 DCP) in a 4 ft x 4 ft steel shelter. Primary record is DCP data logger data with satellitemonitored data used for backup purposes. Primary reference gage is a drop tape gage referenced to the top of "C" channel attached to the flood block. Accubar was damaged on April 2, 2007, when deputy water commissioner purged incorrectly. Accububbler was installed on May 2, 2007. Orifice line still had oil in it from Accubar damage. Orifice line was replaced on May 3, 2007. Accububbler diaphragm was damaged and the Accububbler unit was replaced with a new unit on May 14, 2007.

REMARKS.--Record is complete and reliable, except for the following periods: Dec 2, 2006 - March 3, 2007, when ice affected the stage discharge relationship; March 4 - May 2, 2007, when the Accubar was not functioning correctly; and, May 2-14, 2007, when the new Accubabler was not functioning correctly. Record fair, except during periods of ice affected record and equipment malfunction, and when flows exceed 500 cfs (since such flows are unmeasurable at this location), which all should be considered poor. Station maintained by A. Adame and record developed by Mark Perry.

RATING TABLE. -- PURHILCO03 USED FROM 01-OCT-2006 TO 30-SEP-2007

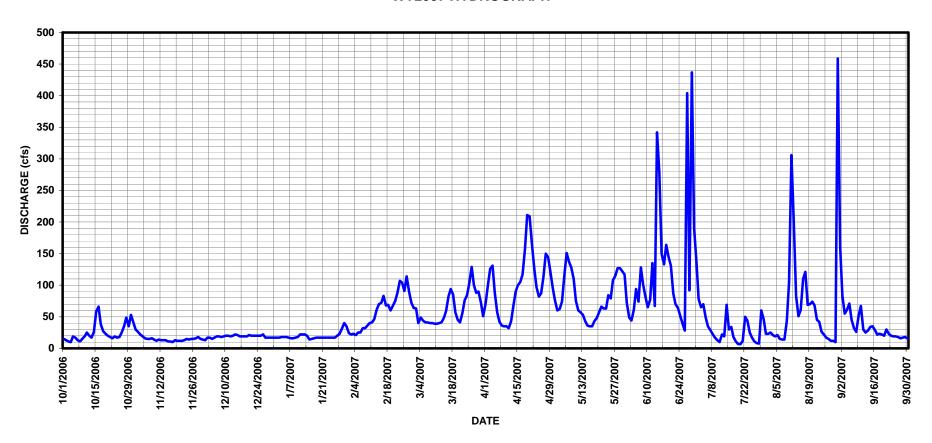
DISCHARGE,	IN	CFS,	WATER	YEAR	OCTOBER	2006	ТО	SEPTEMBER	2007
			I	MEAN V	/ALUES				

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	30	13	17	24	64	70	76	72	138	23	160
2	13	26	17	17	22	63	100	60	49	78	25	83
3	11	22	17	18	23	40	126	62	44	65	21	55
4	10	19	15	18	21	49	131	74	61	70	19	61
5	19	16	17	18	25	44	88	116	94	49	21	71
6	17	15	19	17	25	41	57	151	74	35	15	45
7	13	15	19	16	32	41	42	137	128	29	14	32
8	11	16	18	16	32	40	36	128	101	23	14	26
9	15	14	19	17	36	40	35	110	81	17	43	52
10	19	12	20	18	40	39	35	75	65	13	104	67
11	25	14	20	22	41	39	32	60	77	10	306	30
12	20	13	19	22	46	40	43	57	135	22	197	25
13	17	13	20	22	61	41	66	53	67	19	83	28
14	26	13	22	20	70	48	90	43	342	69	51	34
15	58	11	21	14	72	59	100	36	277	30	61	35
16	66	11	19	15	83	82	105	35	150	34	110	29
17	38	10		16	68	94	117	35	133	18	121	22
18	27	13	19	17	69	85	157	43	164	11	69	23
19	23	12	19	17	60	57	211	48	144	6.9	70	22
20	20	12		17	67	45	209	57	131	6.5	74	20
21	18	12		17	75	41	167	66	87	12	68	30
22	16	13		17	88	56	127	63	70	50	45	23
23	19	15		17	107	76	97	63	64	44	42	20
24	17	14		17	104	84	82	84	52	25	26	19
25	18	15		17	91	103	87	79	39	17	22	19
26	25	15		17	114	129	114	108	28	11	17	18
27	35	16		20	90	100	150	115	404	8.3	15	16
28	49	18		23	72	88	144	127	92	7.7	12	17
29	35	15		31		90	122	127	437	60	12	18
30	53	14		40		73	96	122	191	46	10	16
31	41		17	35		51		117		23	459	
TOTAL	789	454		605	1658	1942	3036	2527	3853	1047.4	2169	1116
MEAN	25.5	15.1		19.5	59.2	62.6	101	81.5	128	33.8	70.0	37.2
AC-FT	1560	901		1200	3290	3850	6020	5010	7640	2080	4300	2210
MAX	66	30		40	114	129	211	151	437	138	459	160
MIN	10	10	13	14	21	39	32	35	28	6.5	10	16
CAL YR		TOTAL	9526.46		26.1 MAX		1 MIN		AC-FT	18900		

26.1 MAX 54.2 MAX 411 MIN 459 MIN TOTAL 19776.4 MEAN WTR YR 2007 6.5 AC-FT 39230

MAX DISCH: 2040 CFS AT 06:30 ON June 27, 2007 GH 7.03 FT. SHIFT -0.12 FT. MAX GH: 7.03 FT. AT 06:30 ON June 27, 2007

# PURGATOIRE RIVER BELOW HIGHLAND DAM NEAR LAS ANIMAS CO WY2007 HYDROGRAPH



#### HIGHLAND CANAL BELOW HIGHLAND DAM NEAR LAS ANIMAS, CO

LOCATION.--Lat 37°54'03", Long 103°17'56" (Hackamore Ranch, CO Quadrangle, Scale 1:24,000), NE1/4, SW1/4, Section 1, T25S, R53W. On the left bank approximately 4 mile downstream of the Highland Canal Diversion Dam, Bent County, 11 mi southwest of Las Animas, Colorado.

DRAINAGE AREA. --N/A.

GAGE.--Float-activated graphic water-stage recorder and shaft encoder in small shelter over CMP stilling well. Shaft encoder wired to satellite-monitored data collection platform (Sutron 8210 HDR DCP) in Purgatoire River below Highland Dam gage shelter. Primary record is satellite-monitored data with the graphic chart recorder used for backup purposes. Standard 5-ft steel Parshall flume is the control. Primary reference gage is outside staff gage installed in flume. The shaft encoder was replaced on June 29, 2007 due to equipment malfunction.

REMARKS.--Record is complete and reliable, except for Oct. 10-12, 14-16, 21-31, Nov. 6-12, 2006, when the flume was submerged due to debris in the canal; Nov. 14-22, 2006, after the canal was shut off for the year, but shaft encoder gage heights remained above zero. Chart recorder was not working, but a site visit on Nov 22, 2006 confirmed that the reference gage was at zero. Jan. 15-31, Feb. 1-10, Feb 16, 2007 when ice in the well affected gage heights. Record good, except during periods of ice affected record, flume submergence, and equipment problems, which should be considered fair to poor. Station maintained by A. Adame and record developed by A. Adame and Mark Perry.

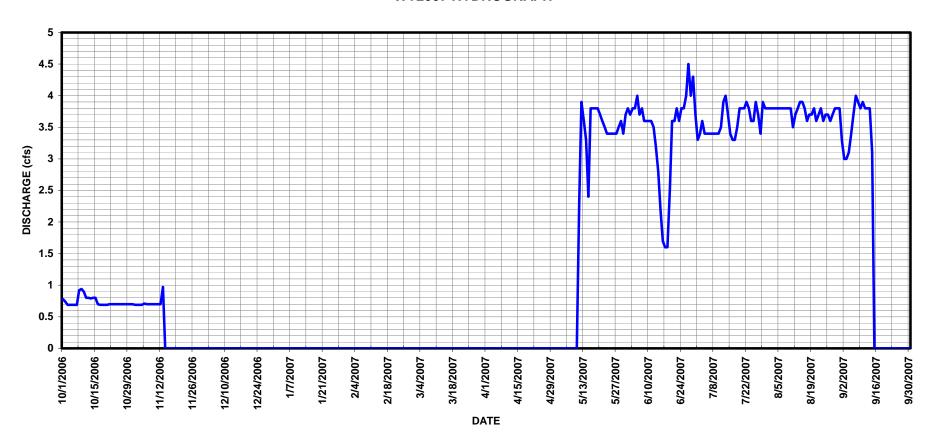
RATING TABLE. -- STD05FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	.69	0	0	0	0	0	0	3.8	3.3	3.8	3.3
2	.74	.69	0	0	0	0	0	0	3.7	3.4	3.8	3.0
3	.69	.69	0	0	0	0	0	0	3.8	3.6	3.8	3.0
4	.69	.69	0	0	0	0	0	0	3.8	3.4	3.8	3.1
5	.69	.71	0	0	0	0	0	0	4.0	3.4	3.8	3.4
6	.69	.70	0	0	0	0	0	0	3.7	3.4	3.8	3.7
7	.69	.70	0	0	0	0	0	0	3.8	3.4	3.8	4.0
8	.92	.70	0	0	0	0	0	0	3.6	3.4	3.8	3.9
9	.94	.70	0	0	0	0	0	0	3.6	3.4	3.8	3.8
10	.90	.70	0	0	0	0	0	0	3.6	3.4	3.8	3.9
11	.80	.70	0	0	0	0	0	2.3	3.6	3.5	3.5	3.8
12	.80	.70	0	0	0	0	0	3.9	3.5	3.9	3.7	3.8
13	.79	.97	0	0	0	0	0	3.6	3.2	4.0	3.8	3.8
14	.80	0	0	0	0	0	0	3.3	2.8	3.7	3.9	3.1
15	.80	0	0	0	0	0	0	2.4	2.2	3.4	3.9	0
16	.70	0	0	0	0	0	0	3.8	1.7	3.3	3.8	0
17	.69	0	0	0	0	0	0	3.8	1.6	3.3	3.6	0
18	.69	0	0	0	0	0	0	3.8	1.6	3.5	3.7	0
19	.69	0	0	0	0	0	0	3.8	2.5	3.8	3.7	0
20	.69	0	0	0	0	0	0	3.7	3.6	3.8	3.8	0
21	.70	0	0	0	0	0	0	3.6	3.6	3.8	3.6	0
22	.70	0	0	0	0	0	0	3.5	3.8	3.9	3.7	0
23	.70	0	0	0	0	0	0	3.4	3.6	3.8	3.8	0
24	.70	0	0	0	0	0	0	3.4	3.8	3.6	3.6	0
25	.70	0	0	0	0	0	0	3.4	3.8	3.6	3.7	0
26	.70	0	0	0	0	0	0	3.4	4.0	3.9	3.7	0
27	.70	0	0	0	0	0	0	3.4	4.5	3.7	3.6	0
28	.70	0	0	0	0	0	0	3.5	4.0	3.4	3.7	0
29	.70	0	0	0		0	0	3.6	4.3	3.9	3.8	0
30	.70	0	0	0		0	0	3.4	3.7	3.8	3.8	0
31	.70		0	0		0		3.7		3.8	3.8	
TOTAL	22.88	9.34	0	0	0	0	0	72.7	102.8	111.5	116.2	49.6
MEAN	.74	.31	0	0	0	0	0	2.35	3.43	3.60	3.75	1.65
AC-FT	45	19	0	0	0	0	0	144	204	221	230	98
MAX	.94	.97	0	0	0	0	0	3.9	4.5	4.0	3.9	4.0
MIN	.69	0	0	0	0	0	0	0	1.6	3.3	3.5	0
CAL YR	2006	TOTAL	517.59 MEAN		1.42 MAX	4.3	MIN	0	AC-FT	1000		
WTR YR	2007	TOTAL	485.02 MEAN		1.33 MAX	4.5	MIN	0	AC-FT	962		

MAX DISCH: 6.45 CFS AT 10:00 ON Nov. 11, 2006 GH 0.42 FT. GH CORR. = +0.07 FT. SHIFT 0 FT. MAX GH: 0.49 FT. (GH CORR. = +0.07 FT. APPLIED) AT 10:00 ON Nov. 11, 2006

## HIGHLAND CANAL BELOW HIGHLAND DAM NEAR LAS ANIMAS CO WY2007 HYDROGRAPH



#### PURGATOIRE RIVER BELOW HIGHLAND DAM NEAR LAS ANIMAS, CO (COMBINED)

#### HIGHLAND CANAL near LAS ANIMAS, CO

LOCATION.--Lat 37°54′03″, Long 103°17′56″ (Hackamore Ranch, CO Quadrangle, Scale 1:24,000), NE1/4, SW1/4, Section 1, T25S, R53W. On the left bank approximately 4 mile downstream of the Highland Canal Diversion Dam, Bent County, 11 mi southwest of Las Animas, Colorado.

DRAINAGE AREA. --N/A.

REMARKS.--The combined record of discharges was obtained by the addition of Highland Canal daily flows to the corresponding daily flows in the Purgatoire River below Highland Dam. The peak discharge for the water year was 2050 cfs at 0630 on June 27, 2007. Combined record is fair, except during periods of estimated flow and flows greater than 500 cfs, which should be considered poor. Record developed by Div. II Hydrographic Staff.

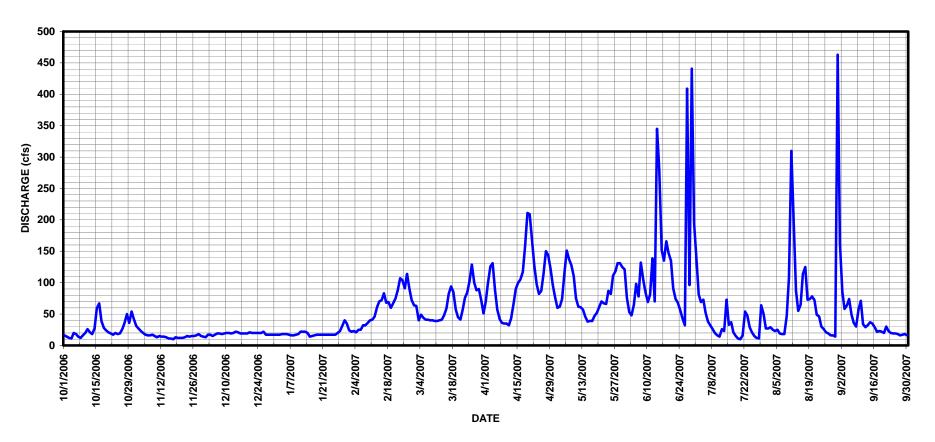
#### PURGATOIRE RIVER BELOW HIGHLAND DAM AND HIGHLAND CANAL (COMBINED)

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	31	13	17	24	64	70	76	76	141	27	163
2	14	27	17	17	22	63	100	60	53	81	29	86
3	12	23	17	18	23	40	126	62	48	69	25	58
4	11	20	15	18	21	49	131	74	65	73	23	64
5	20	17	17	18	25	44	88	116	98	52	25	74
6	18	16	19	17	25	41	57	151	78	38	19	49
7	14	16	19	16	32	41	42	137	132	32	18	36
8	12	17	18	16	32	40	36	128	105	26	18	30
9	16	15	19	17	36	40	35	110	85	20	47	56
10	20	13	20	18	40	39	35	75	69	16	108	71
11	26	15	20	22	41	39	32	62	81	14	310	34
12	21	14	19	22	46	40	43	61	139	26	201	29
13	18	14	20	22	61	41	66	57	70	23	87	32
14	27	13	22	20	70	48	90	46	345	73	55	37
15	59	11	21	14	72	59	100	38	279	33	65	35
16	67	11	19	15	83	82	105	39	152	37	114	29
17	39	10	19	16	68	94	117	39	135	21	125	22
18	28	13	19	17	69	85	157	47	166	15	73	23
19	24	12	19	17	60	57	211	52	147	11	74	22
20	21	12	21	17	67	45	209	61	135	10	78	20
21	19	12	20	17	75	41	167	70	91	16	72	30
22	17	13	20	17	88	56	127	67	74	54	49	23
23	20	15	20	17	107	76	97	66	68	48	46	20
24	18	14	20	17	104	84	82	87	56	29	30	19
25	19	15	20	17	91	103	87	82	43	21	26	19
26	26	15	22	17	114	129	114	111	32	15	21	18
27	36	16	17	20	90	100	150	118	409	12	19	16
28	50	18	17	23	72	88	144	131	96	11	16	17
29	36	15	17	31		90	122	131	441	64	16	18
30	54	14	17	40		73	96	125	195	50	14	16
31	42		17	35		51		121		27	463	
TOTAL	820	467	580	605	1658	1942	3036	2600	3963	1158	2293	1166
MEAN	27	16	19	20	59	63	101	84	132	37	74	39
AC-FT	1630	926	1150	1200	3290	3850	6020	5160	7860	2300	4550	2310
MAX	67	31	22	40	114	129	211	151	441	141	463	163
MIN	11	10	13	14	21	39	32	38	32	10	14	16
CAL YR	2006	TOTAL		MEAN	27.5 MAX	42		0.92	AC-FT	19900		
WTR YR	2007	TOTAL	20288	MEAN	55.6 MAX	46	3 MIN	10	AC-FT	40240		

MAX. DISCHARGE: 2050 CFS AT 06:30 ON JUNE 27, 2007.

# PURGATOIRE RIVER BELOW HIGHLAND DAM AND HIGHLAND CANAL NEAR LAS ANIMAS CO (COMBINED) WY2007 HYDROGRAPH



#### MUDDY CREEK BELOW MUDDY CREEK DAM NEAR TOONERVILLE, CO

LOCATION.-- Latitude 37° 45' 46", Longitude 103° 14' 36" (Toonerville, Colorado quadrangle, 1:24000 scale) in the SE¼ SE¾ Sec.21, T26S, R52W, Bent County on the north bridge abutment where CR 11 crosses Muddy Creek.

DRAINAGE AREA AND PERIOD OF RECORD.--Undetermined. The gage was established in the 1970's. It is unknown at this time how long the station was operated before it was abandoned. The station was reopened in the October of 2004 utilizing the existing stilling well.

GAGE.--Sutron SatLink-2 satellite-monitored data collection platform (DCP) and shaft encoder sheltered in a
 steel "half shelter" on a 24-inch CMP stilling well. The shaft encoder is referenced to a drop tape from
 an "I' beam on a rail along the bridge. A tipping bucket rain gage was installed on June 28, 2007.
 Elev. of gage is approximately 4,230 ft (from topographic map).

REMARKS.--The record is complete and reliable, except for the following periods: Oct. 1-26, 29-31, Nov. 1-30, Dec. 1-31, 2006, Jan. 1-3, 15-17, 20, Mar. 3-4, 9-23, June 29-30, July 1-31, Aug. 1-31, Sept. 1-8, 11-30, 2007, when mud in well resulted in incorrect gage heights; and, Feb. 24-25, 2007, when the gage was set incorrectly, with no record made to document the change. Muddy Creek is an ephemeral stream and flows are generally short duration spikes due to rainfall-runoff events. Numerous no flow and trace flow observations, as well as precipitation data collected at this site, were used to estimate periods of no/trace flow for the record. Record should be considered fair, except for periods with equipment problems, including mud in the stilling well, which should be considered poor. The flashy nature and remote location of the gage make it extremely difficult to operate. Station maintained by A. Adame and record developed by Mark Perry.

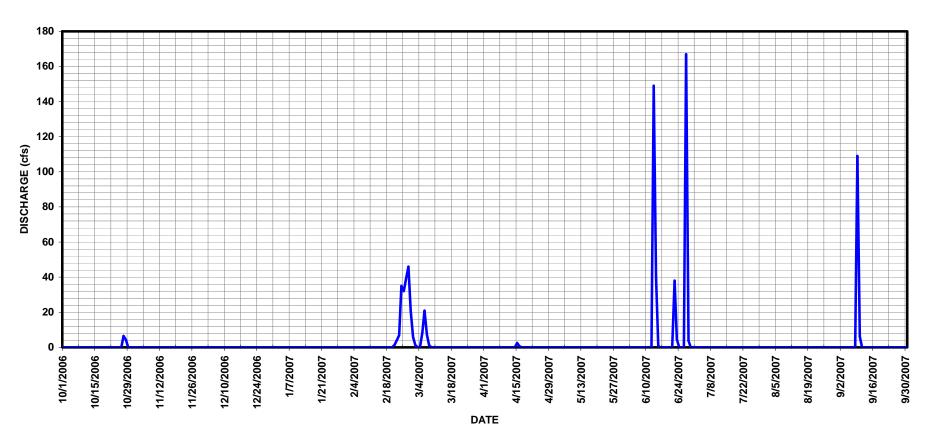
RATING TABLE. -- MUDTOOCOO1 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	5.8	0	0	0	0	0	0
2	0	0	0	0	0	1.3	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	8.4	0	0	0	0	0	0
6	0	0	0	0	0	21	0	0	0	0	0	0
7	0	0	0	0	0	7.2	0	0	0	0	0	0
8	0	0	0	0	0	1.1	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	109
10	0	0	0	0	0	0	0	0	0	0	0	6.2
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	149	0	0	0
14	0	0	0	0	0	0	0	0	40	0	0	0
15	0	0	0	0	0	0	2.5	0	.73	0	0	0
16	0	0	0	0	0	0	.67	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	1.4	0	0	0	0	0	0	0
22	0	0	0	0	3.9	0	0	0	38	0	0	0
23	0	0	0	0	6.9	0	0	0	4.6	0	0	0
24	0	0	0	0	35	0	0	0	0	0	0	0
25	0	0	0	0	32	0	0	0	0	0	0	0
26	0	0	0	0	39	0	0	0	0	0	0	0
27 28	6.5 4.3	0	0	0	46	0	0	0	167 3.7	0	0	0
28 29	4.3	0	0	0	21	0	0	0	3.7	0	0	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0	U	0	0		0		0		0	0	U
31	U		U	U		U		U		U	U	
TOTAL	10.8	0	0	0	185.2	44.8	3.17	0	403.03	0	0	115.2
MEAN	.35	0	0	0	6.61	1.45	.11	0	13.4	0	0	3.84
AC-FT	21	0	0	0	367	89	6.3	0	799	0	0	228
MAX	6.5	0	0	0	46	21	2.5	0	167	0	0	109
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR	2006	TOTAL	355.5 MEAN		0.97 MAX	145	5 MIN	0	AC-FT	705		
WTR YR	2007	TOTAL	762.2 MEAN		2.09 MAX	16	7 MIN	0	AC-FT	1510		

MAX DISCH: 788 CFS AT 03:45 ON Jun. 27, 2007 GH 9.04 FT. GH CORR. -0.08 FT. SHIFT -1.01 FT. MAX GH: 8.96 FT. (GH CORR. -0.08 FT. APPLIED) AT 03:45 ON Jun. 27, 2007

## MUDDY CREEK BELOW MUDDY CREEK DAM NEAR TOONERVILLE CO WY2007 HYDROGRAPH



#### RULE CREEK AT HWY 101 NEAR TOONERVILLE CO

LOCATION.-- Latitude 37° 49' 12", Longitude 103° 10' 55" (Toonerville, Colorado quadrangle, 1:24000 scale) in the NW4 Sec.6, T26S, R51W, Bent County on the downstream side of a bridge abutment at the crossing of Highway 101 and Rule Creek approximately 920 feet below the confluence of Muddy and Rule Creek.

DRAINAGE AREA AND PERIOD OF RECORD.--Undetermined. The gage was established in the 1970's. It is unknown at this time how long the station was operated before it was abandoned. The station was reopened in the October of 2004 utilizing the existing stilling well.

GAGE.--High data rate Sutron SatLink 2 DCP and Sutron Accububble mounted on the north side of the Highway 101 bridge over Rule Creek. Primary record is satellite-monitored data with satellite data used for backup purposes. A drop tape from the bridge is used as the reference gage. In July 2007 the orifice line was extended from the bridge pier out into the channel and a new muffler was installed. A drop wire weight was also installed in July 2007 and is now the primary reference gage. Two crest gages were installed on the north bridge pier adjacent to the Accububble muffler. Elevation of gage is approximately 4,120 ft above mean sea level from topographic map.

REMARKS.--The gage height record is complete and reliable, except for the following periods: Nov 1-30, Dec. 1-31, 2006, Jan. 1-17, June 29, 30, and July 1-24, 2007, due to Accububble sensor problems; April 1-30, May 1-31, and June 1-28, 2007, due to a clogged muffler; Jan. 18-31, and Feb 1-15, 2007, due to ice-affected gage heights; and, Oct. 18, 31, 2006, Mar. 9-31, July 25-31, Aug. 1-31, Sep. 1-8, 2007, when gage heights were not indicative of actual flow. Generally during these periods, gage heights would have indicated some flow, whereas site visits and data from the upstream MUDTOCCO gage showed that there was trace flow or no flow. Record is poor. The flashy nature and remote location of the gage make it extremely difficult to operate. Station maintained by A. Adame and record developed by Mark Perry.

RATING TABLE. -- RULTOOCOO1 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	3.2	0	0	0	0	.50	0
2	0	0	0	0	0	1.8	0	0	0	0	.50	0
3	0	0	0	0	0	1.2	0	0	0	0	.50	0
4	0	0	0	0	0	2.0	0	0	0	0	.50	0
5	0	0	0	0	0	2.2	0	0	0	0	.50	0
6	0	0	0	0	0	4.9	0	0	0	0	.50	0
7	0	0	0	0	.10	6.8	0	0	0	0	.50	0
8	0	0	0	0	.20	2.5	0	0	0	0	.50	0
9	0	0	0	0	0	0	0	0	0	0	.50	18
10	0	0	0	0	0	0	0	0	0	0	.50	5.9
11	0	0	0	0	.10	0	0	0	0	0	.50	2.4
12	0	0	0	0	.20	0	0	0	0	0	.50	1.2
13	0	0	0	0	.50	0	0	0	149	0	.50	.68
14	0	0	0	0	1.0	0	0	0	40	0	.50	.35
15	0	0	0	0	1.0	0	2.5	0	.73	0	.30	.18
16	0	0	0	0	8.0	0	.67	0	0	0	.20	.11
17	0	0	0	0	8.8	0	0	0	0	0	.10	.03
18	0	0	0	0	38	0	0	0	0	0	0	.12
19	0	0	0	0	8.9	0	0	0	0	0	0	0
20	0	0	0	0	7.0	0	0	0	0	0	0	0
21	0	0	0	0	6.4	0	0	0	0	0	0	0
22	0	0	0	0	5.8	0	0	0	38	0	0	0
23	0	0	0	0	5.6	0	0	0	4.6	0	0	0
24	0	0	0	0	7.3	0	0	0	0	0	0	0
25	0	0	0	0	6.3	0	0	0	0	.50	0	0
26	2.6	0	0	0	5.7	0	0	0	0	.50	0	.02
27	3.8	0	0	0	6.9	0	0	0	167	.50	0	.02
28	5.0	0	0	0	6.5	0	0	0	3.7	.50	0	0
29	4.1	0	0	0		0	0	0	0	.50	0	.05
30	2.5	0	0	0		0	0	0	0	.50	0	0
31	0		0	0		0		0		.50	0	
TOTAL	18.0	0	0	0	124.30	24.6	3.17	0	403.03	3.50	7.60	29.06
MEAN	.58	0	0	0	4.44	.79	.11	0	13.4	.11	.25	.97
AC-FT	36	0	0	0	247	49	6.3	0	799	6.9	15	58
MAX	5.0	0	0	0	38	6.8	2.5	0	167	.50	.50	18
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR	2006	TOTAL	1155.7 MEAN		3.17 MAX	47	1 MIN	0	AC-FT	2290		

MAX DISCH: 167 CFS AT 15:15 ON SEP. 9, 2007 GH 4.61 FT. SHIFT -.48 FT. MAX GH: 4.61 FT. AT 15:15 ON SEP. 9, 2007

1.68 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

613.26 MEAN

WTR YR 2007

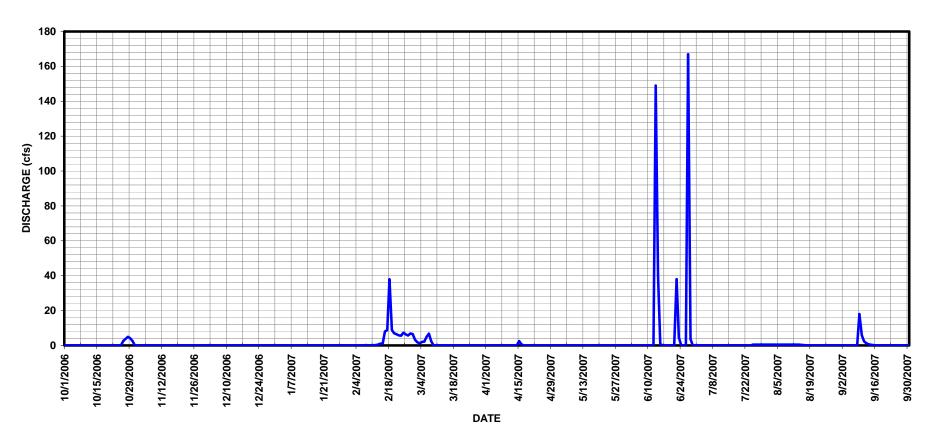
TOTAL

167 MIN

0 AC-FT

1220

## RULE CREEK AT HWY 101 NEAR TOONERVILLE CO WY2007 HYDROGRAPH



#### TRANSMOUNTAIN DIVERSION TO

#### ARKANSAS RIVER BASIN

#### 09061500 COLUMBINE DITCH NEAR FREMONT PASS, CO.

LOCATION.--Lat 39°22'25", long 106°13'38". Columbine ditch diverts water from tributaries of Eagle River in sec. 5, T.8 S., R. 79 W., in Colorado River basin to Chalk Creek (tributary to East Fork Arkansas River) in NW4 sec. 9, T.8 S., R 79 W., in Arkansas River basin.

DRAINAGE AREA. --N/A.

GAGE.--Graphic water-stage recorder, satellite-monitored data collection platform (Sutron SatLink high data rate DCP) and shaft encoder in a 30" diameter metal pipe shelter and well. Primary record is satellite-monitored data with the graphic chart recorder used for backup purposes. Shaft encoder and chart are set to outside staff gage. Control is a 6-foot steel Parshall Flume.

REMARKS.--Record is complete and reliable, except for the following days: May 12, 13, 18, 23-27, 30, 31, June 1, 7, 8, 2007, when ice affected the stage-discharge relationship. Record good, except for periods of ice-affected record, which are poor. Station maintained and record developed by L.R. Schultz.

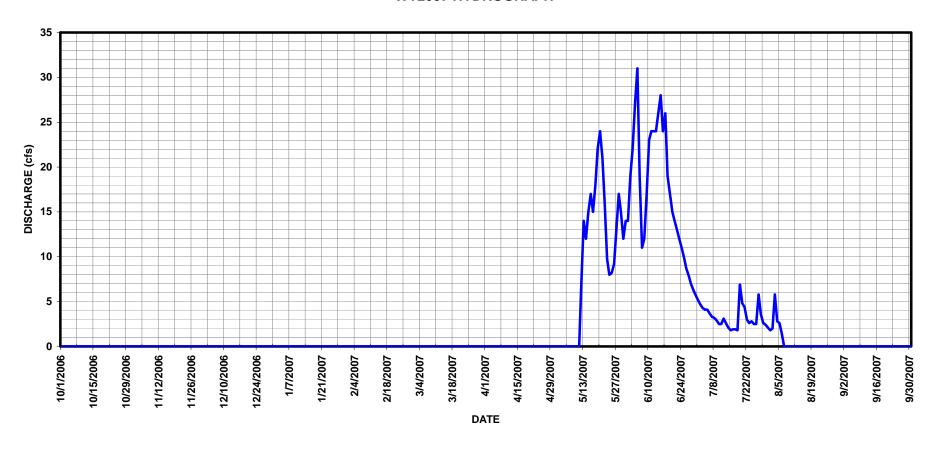
RATING TABLE.--COLDITCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	14	5.2	1.8	0
2	0	0	0	0	0	0	0	0	19	4.7	2.0	0
3	0	0	0	0	0	0	0	0	22	4.3	5.8	0
4	0	0	0	0	0	0	0	0	27	4.1	2.8	0
5	0	0	0	0	0	0	0	0	31	4.1	2.6	0
6	0	0	0	0	0	0	0	0	19	3.7	1.4	0
7	0	0	0	0	0	0	0	0	11	3.3	0	0
8	0	0	0	0	0	0	0	0	12	3.2	0	0
9	0	0	0	0	0	0	0	0	17	2.9	0	0
10	0	0	0	0	0	0	0	0	23	2.5	0	0
11	0	0	0	0	0	0	0	0	24	2.5	0	0
12	0	0	0	0	0	0	0	7.0	24	3.1	0	0
13	0	0	0	0	0	0	0	14	24	2.6	0	0
14	0	0	0	0	0	0	0	12	26	2.1	0	0
15	0	0	0	0	0	0	0	15	28	1.8	0	0
16	0	0	0	0	0	0	0	17	24	1.9	0	0
17	0	0	0	0	0	0	0	15	26	1.9	0	0
18	0	0	0	0	0	0	0	18	19	1.8	0	0
19	0	0	0	0	0	0	0	22	17	6.9	0	0
20	0	0	0	0	0	0	0	24	15	4.8	0	0
21	0	0	0	0	0	0	0	21	14	4.4	0	0
22 23	0	0	0	0	0	0	0	16 9.8	13 12	3.0	0	0
23	0	0	0	0	0	0	0	9.8 8.0	12	2.6 2.8	0	0
25	0	0	0	0	0	0	0	8.0	9.9	2.8	0	0
26	0	0	0	0	0	0	0	9.2	8.7	2.5	0	0
27	0	0	0	0	0	0	0	13	7.9	5.8	0	0
28	0	0	0	0	0	0	0	17	7.0	3.6	0	0
29	0	0	0	0		0	0	15	6.3	2.6	0	0
30	0	0	0	0		0	0	12	5.7	2.4	0	0
31	0		0	0		Ö		14		2.1	0	
01	Ü		Ü	•		Ü					ŭ	
TOTAL	0	0	0	0	0	0	0	287.2	517.5	101.7	16.4	0
MEAN	0	0	0	0	0	0	0	9.26	17.3	3.28	.53	0
AC-FT	0	0	0	0	0	0	0	570	1030	202	33	0
MAX	0	0	0	0	0	0	0	24	31	6.9	5.8	0
MIN	0	0	0	0	0	0	0	0	5.7	1.8	0	0
CAL YR	2006	TOTAL	978.98 MEAN		2.68 MAX	39	MIN	0	AC-FT	1940		
WTR YR	2007	TOTAL	922.8 MEAN		2.53 MAX	31		0	AC-FT	1830		

MAX DISCH: 49.8 CFS AT 17:15 ON Jun. 15, 2007 GH 1.55 FT. SHIFT 0.03 FT. MAX GH: 1.55 FT. AT 17:15 ON Jun. 15, 2007

# 09061500 COLUMBINE DITCH NEAR FREMONT PASS CO WY2007 HYDROGRAPH



#### TRANSMOUNTAIN DIVERSION TO

#### ARKANSAS RIVER BASIN

#### 09062000 EWING DITCH AT TENNESSEE PASS, CO

LOCATION.--Lat 39°21'40", long 106°18'22", diverts water from Piney Creek in sec. 11, T.8 S., R.80 W., in Eagle River basin, to Thayer Gulch (tributary to Tennessee Creek) in sec. 11, T. 8 S., R.80 W., in Arkansas River basin

DRAINAGE AREA. --N/A.

GAGE.--Graphic water-stage recorder, satellite-monitored data collection platform (Sutron SatLink high data rate DCP) and shaft encoder in a 30" diameter metal pipe shelter and well. Primary record is satellite-monitored data with the graphic chart recorder used for backup purposes. Shaft encoder and chart are set to outside staff gage. Control is a 4-foot steel Parshall Flume.

REMARKS.--Record is complete and reliable, except for the following days when the stage- discharge relationship was affected by ice in the flume: May 4, 8, 9, 2007. Record good, except for periods of ice effects, which are poor. Station maintained and record developed by L.R. Schultz.

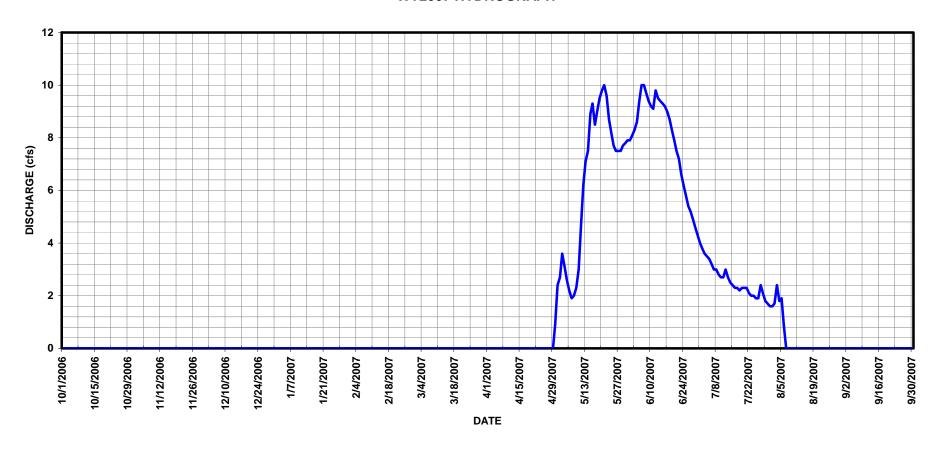
RATING TABLE. -- STD04FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	2.4	7.9	4.0	1.6	0
2	0	0	0	0	0	0	0	2.7	8.1	3.8	1.7	0
3	0	0	0	0	0	0	0	3.6	8.3	3.6	2.4	0
4	0	0	0	0	0	0	0	3.1	8.6	3.5	1.8	0
5	0	0	0	0	0	0	0	2.6	9.4	3.4	1.9	0
6	0	0	0	0	0	0	0	2.2	10	3.2	.82	0
7	0	0	0	0	0	0	0	1.9	10	3.0	0	0
8	0	0	0	0	0	0	0	2.0	9.7	3.0	0	0
9	0	0	0	0	0	0	0	2.3	9.4	2.8	0	0
10	0	0	0	0	0	0	0	3.0	9.2	2.7	0	0
11	0	0	0	0	0	0	0	4.6	9.1	2.7	0	0
12	0	0	0	0	0	0	0	6.2	9.8	3.0	0	0
13	0	0	0	0	0	0	0	7.1	9.5	2.7	0	0
14	0	0	0	0	0	0	0	7.5	9.4	2.5	0	0
15	0	0	0	0	0	0	0	8.9	9.3	2.4	0	0
16	0	0	0	0	0	0	0	9.3	9.2	2.3	0	0
17	0	0	0	0	0	0	0	8.5	9.0	2.3	0	0
18	0	0	0	0	0	0	0	9.0	8.7	2.2	0	0
19	0	0	0	0	0	0	0	9.5	8.3	2.3	0	0
20	0	0	0	0	0	0	0	9.8	7.9	2.3	0	0
21	0	0	0	0	0	0	0	10	7.5	2.3	0	0
22	0	0	0	0	0	0	0	9.6	7.2	2.1	0	0
23	0	0	0	0	0	0	0	8.7	6.6	2.0	0	0
24	0	0	0	0	0	0	0	8.2	6.2	2.0	0	0
25	0	0	0	0	0	0	0	7.7	5.8	1.9	0	0
26	0	0	0	0	0	0	0	7.5	5.4	1.9	0	0
27	0	0	0	0	0	0	0	7.5	5.2	2.4	0	0
28	0	0	0	0	0	0	0	7.5	4.9	2.1	0	0
29	0	0	0	0		0	0	7.7	4.6	1.8	0	0
30	0	0	0	0		0	.90	7.8	4.3	1.7	0	0
31	0		0	0		0		7.9		1.6	0	
TOTAL	0	0	0	0	0	0	.90	196.3	238.5	79.5	10.22	0
MEAN	0	0	0	0	0	0	.030	6.33	7.95	2.56	.33	0
AC-FT	0	0	0	0	0	0	1.8	389	473	158	20	0
MAX	0	0	0	0	0	0	.90	10	10	4.0	2.4	0
MIN	0	0	0	0	0	0	0	1.9	4.3	1.6	0	0
CAL YR	2006	TOTAL	485.71 MEAN		1.33 MAX	11	MIN	0	AC-FT	963		
WTR YR	2007	TOTAL	525.42 MEAN		1.44 MAX	10	) MIN	0	AC-FT	1040		

MAX DISCH: 12.4 CFS AT 17:00 ON May. 15, 2007 GH 0.88 FT. SHIFT -0.03 FT. MAX GH: 0.88 FT. AT 17:00 ON May. 15, 2007

# 09062000 EWING DITCH AT TENNESSEE PASS CO WY2007 HYDROGRAPH



#### TRANSMOUNTAIN DIVERSION TO

#### ARKANSAS RIVER BASIN

#### 09062500 WURTZ DITCH NEAR TENNESSEE PASS, CO

LOCATION.--Lat 39°21'15", long 106°21'09"; diverts water from tributaries of Eagle River in Colorado River basin to West Tennessee Creek (tributary to Tennessee Creek) in sec. 17, T.8 S., R.80 W., in Arkansas River basin.

DRAINAGE AREA. --N/A.

GAGE.--Graphic water-stage recorder, satellite-monitored data collection platform (Sutron SatLink high data rate DCP and logger) and shaft encoder in a 30" diameter metal pipe shelter and well. Primary record is satellite-monitored data with the graphic chart recorder used for backup purposes. Shaft encoder and chart are set to outside staff gage. Control is a 6-foot steel Parshall Flume.

REMARKS.--Record is complete and reliable, except for the following periods: May 1, 6, 8, 9, 23, 24, 2007, when the stage-discharge relationship was ice-affected; and the period surrounding May 8 & May 24, 2007, when shaft encoder temporarily malfunctioned. Record good, except for those periods of ice affected record, which are poor, and the period of equipment malfunction, which is fair. Station maintained and record developed by L.R. Schultz.

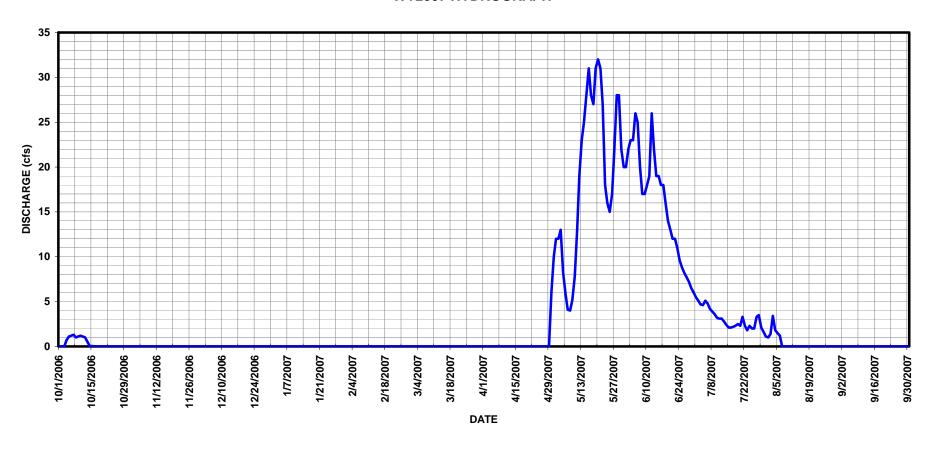
RATING TABLE. -- WURDITCOO1 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	10	20	5.5	1.0	0
2	0	0	0	0	0	0	0	12	22	5.1	1.4	0
3	0	0	0	0	0	0	0	12	23	4.7	3.4	0
4	.69	0	0	0	0	0	0	13	23	4.6	1.8	0
5	1.1	0	0	0	0	0	0	8.3	26	5.1	1.5	0
6	1.2	0	0	0	0	0	0	5.9	25	4.8	1.2	0
7	1.3	0	0	0	0	0	0	4.1	20	4.2	0	0
8	1.0	0	0	0	0	0	0	4.0	17	3.9	0	0
9	1.1	0	0	0	0	0	0	5.2	17	3.6	0	0
10	1.2	0	0	0	0	0	0	7.8	18	3.2	0	0
11	1.1	0	0	0	0	0	0	13	19	3.1	0	0
12	1.0	0	0	0	0	0	0	19	26	3.1	0	0
13	.48	0	0	0	0	0	0	23	22	2.8	0	0
14	.03	0	0	0	0	0	0	25	19	2.4	0	0
15	.03	0	0	0	0	0	0	28	19	2.1	0	0
16	.02	0	0	0	0	0	0	31	18	2.1	0	0
17	0	0	0	0	0	0	0	28	18	2.2	0	0
18	0	0	0	0	0	0	0	27	16	2.3	0	0
19	0	0	0	0	0	0	0	31	14	2.5	0	0
20	0	0	0	0	0	0	0	32	13	2.3	0	0
21	0	0	0	0	0	0	0	31	12	3.3	0	0
22	0	0	0	0	0	0	0	27	12	2.3	0	0
23	0	0	0	0	0	0	0	18	11	1.8	0	0
24	0	0	0	0	0	0	0	16	9.6	2.3	0	0
25	0	0	0	0	0	0	0	15	8.8	2.0	0	0
26	0	0	0	0	0	0	0	17	8.2	2.0	0	0
27	0	0	0	0	0	0	0	22	7.7	3.3	0	0
28	0	0	0	0	0	0	0	28	7.2	3.5	0	0
29	0	0	0	0		0	0	28	6.5	2.1	0	0
30	0	0	0	0		0	6.0	22	6.0	1.6	0	0
31	0		0	0		0		20		1.1	0	
TOTAL	10.25	0	0	0	0	0	6.0	583.3	484.0	94.9	10.3	0
MEAN	.33	0	0	0	0	0	.20	18.8	16.1	3.06	.33	0
AC-FT	20	0	0	0	0	0	12	1160	960	188	20	0
MAX	1.3	0	0	0	0	0	6.0	32	26	5.5	3.4	0
MIN	0	0	0	0	0	0	0	4.0	6.0	1.1	0	0
CAL YR	2006	TOTAL		MEAN	1.00 MAX		12 MIN	0	AC-FT	726		
WTR YR	2007	TOTAL	1188.75 N	1EAN	3.26 MAX	: 3	32 MIN	0	AC-FT	2360		

MAX DISCH: 41.6 CFS AT 21:00 ON May. 28, 2007 GH 1.37 FT. SHIFT 0.04 FT. MAX GH: 1.37 FT. AT 21:00 ON May. 28, 2007

# 09062500 WURTZ DITCH NEAR TENNESSEE PASS CO WY2007 HYDROGRAPH



#### TRANSMOUNTAIN DIVERSION TO

#### ARKANSAS RIVER BASIN

### WURTZ DITCH EXTENSION AT TENNESSEE PASS NEAR LEADVILLE, CO

LOCATION.--Lat 39°23'41", long 106°21'10", sec. 32, T.7 S., R.80 W., Eagle County.

DRAINAGE AREA. -- N/A.

REMARKS.--Record is complete and reliable, except for the periods: May 2-5, 7-9, 23-25, June 8, 2007, when ice affected the stage-discharge relationship. Record good, except during periods of ice affected record, which are poor. Station maintained and record developed by L.R. Schultz.

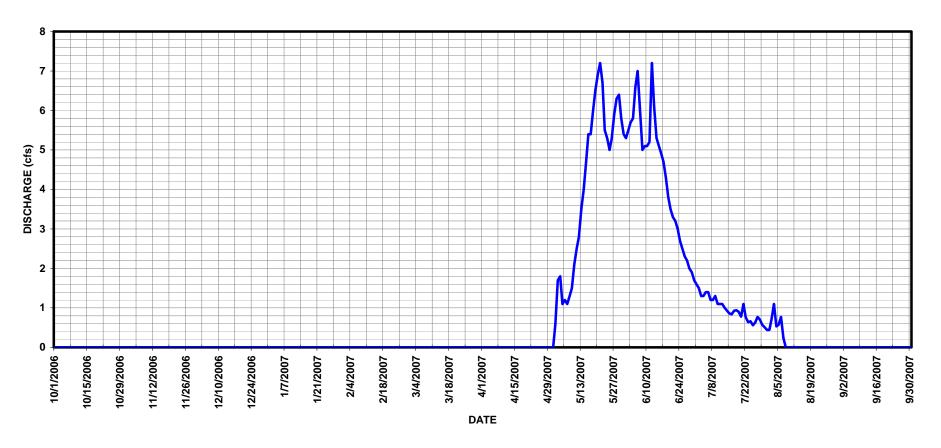
RATING TABLE. -- WUREXDCOO1 USED FROM 01-OCT-2006 TO 30-SEP-2007

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	5.3	1.6	.44	0
2	0	0	0	0	0	0	0	.60	5.5	1.5	.73	0
3	0	0	0	0	0	0	0	1.7	5.7	1.3	1.1	0
4	0	0	0	0	0	0	0	1.8	5.8	1.3	.53	0
5	0	0	0	0	0	0	0	1.1	6.6	1.4	.57	0
6	0	0	0	0	0	0	0	1.2	7.0	1.4	.77	0
7	0	0	0	0	0	0	0	1.1	6.0	1.2	.24	0
8	0	0	0	0	0	0	0	1.3	5.0	1.2	0	0
9	0	0	0	0	0	0	0	1.5	5.1	1.3	0	0
10	0	0	0	0	0	0	0	2.1	5.1	1.1	0	0
11	0	0	0	0	0	0	0	2.5	5.2	1.1	0	0
12	0	0	0	0	0	0	0	2.8	7.2	1.1	0	0
13	0	0	0	0	0	0	0	3.5	6.1	1.0	0	0
14	0	0	0	0	0	0	0	4.0	5.3	.93	0	0
15	0	0	0	0	0	0	0	4.7	5.1	.86	0	0
16	0	0	0	0	0	0	0	5.4	4.9	.84	0	0
17	0	0	0	0	0	0	0	5.4	4.7	.93	0	0
18	0	0	0	0	0	0	0	6.0	4.3	.94	0	0
19	0	0	0	0	0	0	0	6.5	3.8	.90	0	0
20	0	0	0	0	0	0	0	6.9	3.5	.78	0	0
21	0	0	0	0	0	0	0	7.2	3.3	1.1	0	0
22	0	0	0	0	0	0	0	6.7	3.2	.76	0	0
23	0	0	0	0	0	0	0	5.5	3.0	.64	0	0
24	0	0	0	0	0	0	0	5.3	2.7	.66	0	0
25	0	0	0	0	0	0	0	5.0	2.5	.56	0	0
26	0	0	0	0	0	0	0	5.3	2.3	.63	0	0
27	0	0	0	0	0	0	0	5.9	2.2	.77	0	0
28	0	0	0	0	0	0	0	6.3	2.0	.70	0	0
29	0	0	0	0		0	0	6.4	1.9	.57	0	0
30	0	0	0	0		0	0	5.8	1.7	.51	0	0
31	0		0	0		0		5.4		.44	0	
TOTAL	0	0	0	0	0	0	0	124.90	132.0	30.02	4.38	0
MEAN	0	0	0	0	0	0	0	4.03	4.40	.97	.14	0
AC-FT	0	0	0	0	0	0	0	248	262	60	8.7	0
MAX	0	0	0	0	0	0	0	7.2	7.2	1.6	1.1	0
MIN	0	0	0	0	0	0	0	0	1.7	.44	0	0
CAL YR	2006	TOTAL	355.67	MEAN	.97 MAX	12	MIN	0	AC-FT	705		
WTR YR		TOTAL	291.3	MEAN	.8 MAX		MIN	0	AC-FT	578		

MAX DISCH: 9.52 CFS AT 10:45 ON May. 24, 2007 GH 0.56 FT. SHIFT -.01 FT. MAX GH: 0.56 FT. AT 10:45 ON May. 24, 2007

## WURTZ DITCH EXTENSION AT TENNESSEE PASS NEAR LEADVILLE CO WY2007 HYDROGRAPH



#### TRANSMOUNTAIN DIVERSION TO

#### ARKANSAS RIVER BASIN

### 09063700 HOMESTAKE TUNNEL NEAR GOLD PARK, CO

LOCATION.--Lat 39°16'52", long 106°25'56"; Homestake tunnel diverts water from Homestake Lake, in sec. 17, T. 8 S., R. 81 W., in Eagle River basin, to Lake Fork Creek in Arkansas River basin.

GAGE.--Graphic water-stage recorder, satellite-monitored data collection platform (Sutron SatLink high data rate DCP) and shaft encoder in a 4 ft x 4 ft wood shelter and concrete well. Primary record is satellite-monitored data with the graphic chart recorder used for backup purposes. Shaft encoder and chart are set to inside electric tape gage. Control is a 12-foot concrete Parshall Flume.

REMARKS.--Record is complete and reliable. Record good. Station maintained and record developed by L.R. Schultz.

RATING TABLE. -- HOMTUNCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

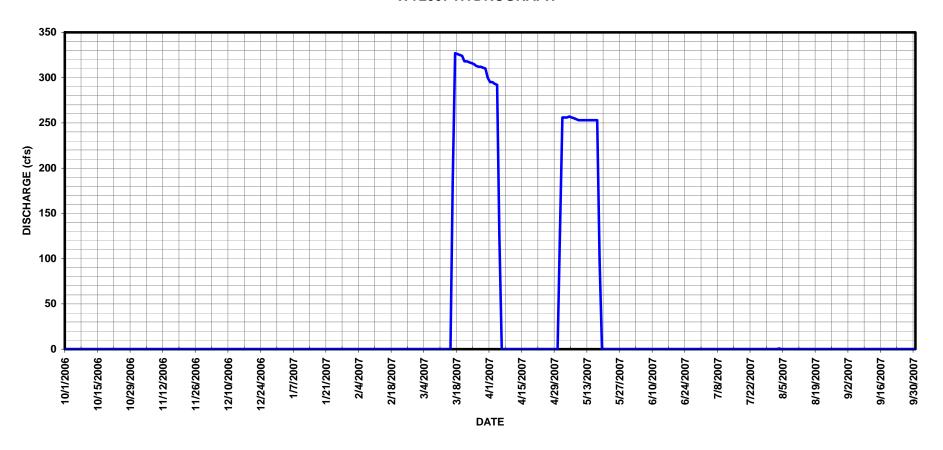
#### DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NC	DV DE	C 3	JAN	F	EB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0		0	0	0		0	0	295	131	0	0	0	0
2	0		0	0	0		0	0	295	256	0	0	0	0
3	0		0	0	0		0	0	293	256	0	0	.75	0
4	0		0	0	0		0	0	292	256	0	0	0	0
5	0		0	0	0		0	0	125	257	0	0	0	0
6	0		0	0	0		0	0	0	256	0	0	0	0
7	0		0	0	0		0	0	0	255	0	0	0	0
8	0		0	0	0		0	0	0	254	0	0	0	0
9	0		0	0	0		0	0	0	253	0	0	0	0
10	0		0	0	0		0	0	0	253	0	0	0	0
11	0		0	0	0		0	0	0	253	0	0	0	0
12	0		0	0	0		0	0	0	253	0	0	0	0
13	0		0	0	0		0	0	0	253	0	0	0	0
14	0		0	0	0		0	0	0	253	0	0	0	0
15	0		0	0	0		0	0	0	253	0	0	0	0
16	0		0	0	0		0	185	0	253	0	0	0	0
17	0		0	0	0		0	327	0	253	0	0	0	0
18	0		0	0	0		0	326	0	98	0	0	0	0
19	0		0	0	0		0	325	0	0	0	0	0	0
20	0		0	0	0		0	324	0	0	0	0	0	0
21	0		0	0	0		0	318	0	0	0	0	0	0
22	0		0	0	0		0	318	0	0	0	0	0	0
23	0		0	0	0		0	317	0	0	0	0	0	0
24	0		0	0	0		0	316	0	0	0	0	0	0
25	0		0	0	0		0	315	0	0	0	0	0	0
26	0		0	0	0		0	313	0	0	0	0	0	0
27	0		0	0	0		0	312	0	0	0	0	0	0
28	0		0	0	0		0	312	0	0	0	0	0	0
29	0		0	0	0	-		311	0	0	0	0	0	0
30	0		0	0	0	-		310	0	0	0	0	0	0
31	0		-	0	0	-		300		0		0	0	
TOTAL	0		0	0	0		0	4929	1300	4296	0	0	.75	0
MEAN	0		0	0	0		0	159	43.3	139	0	0	.024	0
AC-FT	0		0	0	0		0	9780	2580	8520	0	0	1.5	0
MAX	0		0	0	0		0	327	295	257	0	0	.75	0
MIN	0		0	0	0		0	0	0	0	0	0	0	0
CAL YR	2006	TOTAL	16379.8	MEAN		44.9	MAX	308	MIN	0	AC-FT	32490		
WTR YR	2007	TOTAL	10525.75			28.8	MAX	327	MIN	0	AC-FT	20880		
******	2007	2011111	10020.70	1177711		_0.0	- 11 11 1	521	-1114	O	110 11	20000		

MAX DISCH: 328 CFS AT 11:00 ON Mar. 16, 2007 GH 3.3 FT. SHIFT 0.08 FT. MAX GH: 3.3 FT. AT 11:00 ON Mar. 16, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 09063700 HOMESTAKE TUNNEL NEAR GOLD PARK CO WY2007 HYDROGRAPH



#### TRANSMOUNTAIN DIVERSION TO

#### ARKANSAS RIVER BASIN

#### 09077160 BOUSTEAD TUNNEL AT EAST PORTAL NEAR LEADVILLE, CO

LOCATION.--Lat 39°16'40", long 106°25'40"; Charles H. Boustead Tunnel diverts water from the main stem and tributaries of Fryingpan River in Colorado River basin, to Lake Fork in sec. 10, T. 9 S., R. 81 W., in Arkansas River basin.

GAGE.--Graphic water-stage recorder with satellite-monitored data collection platform (Sutron 8210 high data rate DCP) and shaft encoder in a 5'x 5' concrete shelter. Primary record is satellite-monitored data with the graphic chart recorder used for backup purposes. Shaft encoder and chart are set to inside drop tape and RP with an outside staff gage in the flume used as a supplemental reference gage. An electric tape gage was installed on Aug. 20, 2003. Control is a 15-foot concrete Parshall Flume.

REMARKS.--Record is complete and reliable, except for the following periods: Oct. 1 - Nov. 6, 2006, when maintenance was being performed in the tunnel and a flume by-pass drain was used, resulting in these periods becoming estimated days. Record fair. The Boustead Tunnel flume is located approximately 90 feet downstream of the mouth of Boustead Tunnel. There are no provisions over this 90-foot reach for a deeper channel section prior to the flume entrance, nor any other channel modifications, to help still and slow the flow to the recommended tranquil flow conditions. Observations of flow conditions at higher stages over the past several years have indicated the approach velocities to the flume are too high and poorly distributed by the time flow reaches the flume entrance. This results in increasing positive shifts to the standard 15-ft. Parshall Flume rating as stage increases. Station maintained and record developed by L.R. Schultz.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- BOUTUNCOO1 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	AN VALUE	S					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	1.6	1.4	1.7	1.7	2.2	1.8	191	430	184	4.2	2.5
2	2.5	1.6	1.4	1.7	1.7	2.2	1.9	263	516	183	3.6	2.5
3	2.5	1.6	1.4	1.7	1.7	2.2	1.9	300	635	150	3.1	2.5
4	2.4	1.5	1.4	1.7	1.7	2.2	1.9	231	628	123	3.1	2.5
5	2.4	1.5	1.4	1.7	1.7	1.9	1.9	128	711	117	3.1	2.5
6	2.4	1.5	1.4	1.7	1.8	1.9	1.9	90	637	121	3.1	2.5
7	2.4	1.4	1.4	1.7	1.9	1.9	1.9	65	393	97	3.1	2.5
8	2.3	1.4	1.4	1.7	1.9	1.9	1.9	51	314	83	3.1	2.5
9	2.3	1.4	1.4	1.7	1.9	1.9	1.9	52	394	63	3.1	2.5
10	2.3	1.4	1.4	1.7	1.9	1.9	1.9	89	518	45	3.1	2.5
11	2.2	1.4	1.4	1.7	1.9	1.9	2.1	177	601	41	3.1	2.6
12	2.2	1.4	1.4	1.7	1.9	1.9	4.9	363	802	61	3.1	2.7
13	2.2	1.4	1.4	1.7	1.9	1.8	6.9	469	636	54	3.1	2.8
14	2.1	1.4	1.5	1.7	2.0	1.8	3.7	551	618	40	3.1	2.8
15	2.1	1.4	1.7	1.7	2.2	1.7	3.7	618	644	32	3.0	2.8
16	2.1	1.4	1.7	1.7	2.2	1.7	3.7	670	647	2.2	2.9	2.8
17	2.1	1.4	1.7	1.7	2.1	1.7	3.7	602	702	14	3.0	2.8
18	2.0	1.4	1.7	1.7	1.9	1.7	3.7	594	634	10	3.1	2.8
19	2.0	1.4	1.7	1.7	1.9	1.7	3.7	677	509	18	3.0	2.8
20	2.0	1.4	1.7	1.7	1.9	1.7	3.7	719	510	14	2.6	2.8
21	1.9	1.4	1.7	1.7	1.9	1.8	3.7	656	434	2.2	2.3	2.8
22	1.9	1.4	1.7	1.7	1.9	1.8	3.7	570	376	14	2.2	2.9
23	1.9	1.4	1.7	1.7	1.9	1.7	8.2	384	325	6.4	2.2	3.1
24	1.9	1.4	1.7	1.7	1.9	1.7	16	285	305	5.8	2.2	3.1
25	1.8	1.4	1.7	1.7	1.9	1.7	14	251	258	7.3	2.2	3.1
26	1.8	1.4	1.7	1.7	1.9	1.8	13	248	223	8.0	2.2	3.1
27	1.8	1.4	1.7	1.7	2.0	1.9	12	311	196	9.1	2.2	3.1
28	1.7	1.4	1.7	1.7	2.2	1.9	25	448	173	6.6	2.2	3.1
29	1.7	1.4	1.7	1.7		1.9	59	512	146	5.3	2.2	3.1
30	1.7	1.4	1.7	1.7		1.7	123	411	143	4.6	2.2	3.1
31	1.6		1.7	1.7		1.8		417		2.6	2.3	
TOTAL	64.7	42.9	48.6	52.7	53.4	57.5	336.3	11393	14058	1563.7	87.0	83.2
MEAN	2.09	1.43	1.57	1.70	1.91	1.85	11.2	368	469	50.4	2.81	2.77
AC-FT	128	85	96	105	106	114	667	22600	27880	3100	173	165
MAX	2.5	1.6	1.7	1.7	2.2	2.2	123	719	802	184	4.2	3.1
MIN	1.6	1.4	1.4	1.7	1.7	1.7	1.8	51	143	2.6	2.2	2.5
CAL YR		TOTAL	31463.6	MEAN	86.2 MAX		2 MIN		AC-FT	62410		

MAX DISCH: 931 CFS AT 21:15 ON Jun. 5, 2007 GH 5.42 FT. SHIFT 0.26 FT. MAX GH: 5.42 FT. AT 21:15 ON Jun. 5, 2007

76.3 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

27841 MEAN

WTR YR 2007

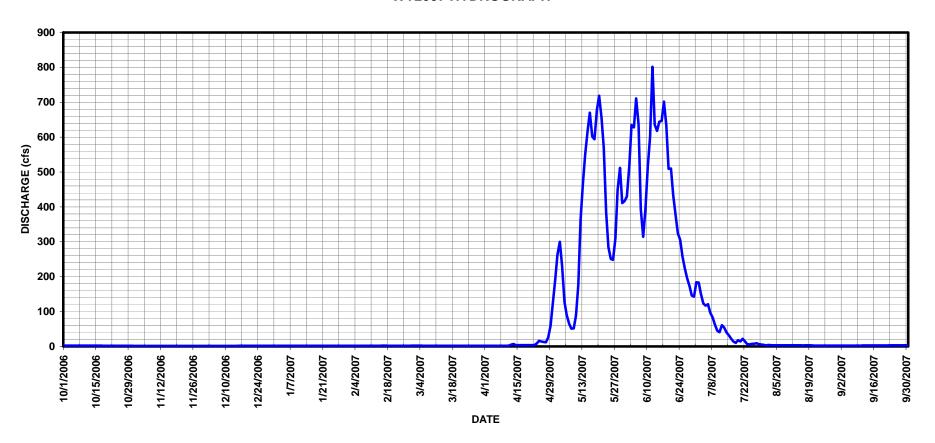
TOTAL

802 MIN

1.4 AC-FT

55220

## 09077160 BOUSTEAD TUNNEL AT EAST PORTAL NEAR LEADVILLE CO WY2007 HYDROGRAPH



#### TRANSMOUNTAIN DIVERSION TO

#### ARKANSAS RIVER BASIN

### 09077500 BUSK-IVANHOE TUNNEL AT EAST PORTAL NEAR MALTA, CO

LOCATION.--Lat 39°14'55", long 106°28'14"; Water diverted from Ivanhoe Lake, tributary to Fryingpan River in sec. 13, T. 9 S., R. 82 W., in Roaring Fork River basin, to Busk Creek (tributary to Lake Fork) in sec. 20, T. 9 S., R. 81 W., in Arkansas River basin.

GAGE.--Graphic water-stage recorder, satellite-monitored data collection platform (Sutron SatLink high data rate DCP) and shaft encoder in a 3'x3' metal and wood shelter. Satellite monitored DCP is the primary source of stage data with chart record used for backup. Shaft encoder and chart are set to outside staff gage in the flume. Control is an 8-foot steel Parshall Flume.

**REMARKS.**—Record is complete and reliable. Record good. Station maintained and record developed by L.R. Schultz.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

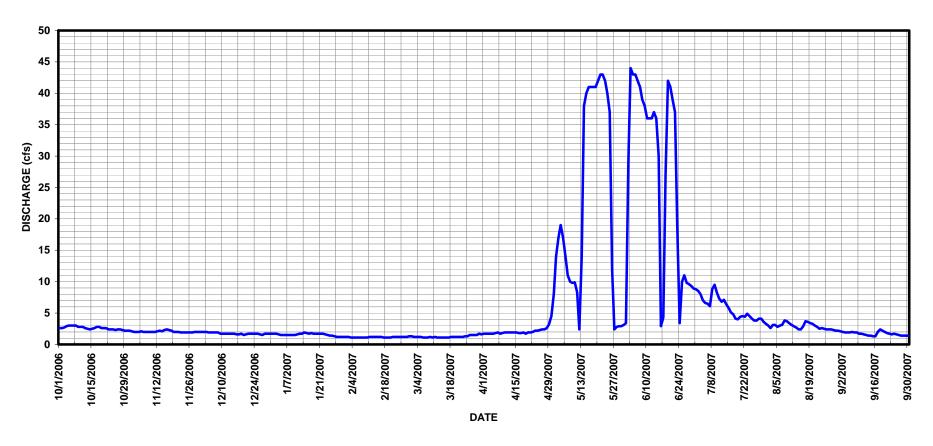
RATING TABLE.--BUSTUNCO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL	AUG SEP
1 2.6 2.1 2.0 1.7 1.2 1.3 1.7 8.0 3.4 8.8	3.0 2.1
2 2.6 2.0 2.0 1.7 1.2 1.2 1.7 14 29 8.5	2.6 2.0
3 2.7 2.0 2.0 1.6 1.1 1.2 1.7 17 44 8.0	3.1 1.9
4 2.9 2.0 1.9 1.5 1.1 1.2 1.7 19 43 7.0	3.1 1.9
	2.8 1.9
	3.0 2.0
	3.1 1.9
	3.8 1.9
	3.7 1.7
	3.4 1.7
	3.1 1.6
	2.9 1.5
	2.7 1.4
	2.4 1.4
	2.4 1.3
	2.9 1.3
	3.7 2.0
	3.6 2.4
	3.4 2.2
	3.3 2.0
	3.0 1.8
	2.8 1.7
	2.5 1.6
	2.6 1.7
	2.5 1.6 2.4 1.5
	2.4 1.4
	2.4 1.4
	2.3 1.4
	2.2 1.4
	2.2
31 2.2 1.7 1.2 1.0 3.1 3.3	
TOTAL 80.4 61.2 53.8 48.2 32.5 38.6 61.9 669.5 807.6 178.9 8	9.3 51.6
MEAN 2.59 2.04 1.74 1.55 1.16 1.25 2.06 21.6 26.9 5.77 2	.88 1.72
	177 102
MAX 3.0 2.4 2.0 1.9 1.3 1.7 4.5 43 44 9.5	3.8 2.4
MIN 2.2 1.9 1.5 1.2 1.1 1.1 1.7 2.4 2.9 3.3	2.2 1.3
CAL YR 2006 TOTAL 2438.1 MEAN 6.68 MAX 44 MIN .91 AC-FT 4800	
WTR YR 2007 TOTAL 2173.5 MEAN 5.95 MAX 44 MIN 1.1 AC-FT 4310	

MAX DISCH: 44.7 CFS AT 14:30 ON Jun. 2, 2007 GH 1.17 FT. SHIFT 0.06 FT. MAX GH: 1.17 FT. AT 14:30 ON Jun. 2, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 09077500 BUSK-IVANHOE TUNNEL AT EAST PORTAL NEAR MALTA CO WY2007 HYDROGRAPH



#### TRANSMOUNTAIN DIVERSION TO

#### ARKANSAS RIVER BASIN

#### 09073000 TWIN LAKES TUNNEL AT EAST PORTAL NEAR TWIN LAKES, CO

LOCATION.--Lat 39°04'56", long 106°32'24"; diverts water from tributaries of Roaring Fork River in Colorado River Basin to North Fork Lake Creek in sec. 22, T.11 S., R.82 W., in Arkansas River basin.

#### DRAINAGE AREA. --N/A

GAGE.--Graphic water-stage recorder, with Sutron high data rate 8210 DCP and shaft encoder in a 5' x 5' concrete shelter and well. Primary record is satellite-monitored data with the graphic chart recorder used for backup purposes. Shaft encoder and chart are set to an electric tape gage in the shelter and well. Outside staff gage in flume is used for supplemental readings. Control is a 12-foot concrete Parshall Flume.

REMARKS.--Record is complete, but not reliable due to problems with the operation of a stilling well drain valve (see following explanation); and the period of Dec. 28, 2006 - Jan. 10, 2007, when gage heights were affected by ice. Record is considered poor for the entire water year due to problems with the gage operation by the Twin Lakes Reservoir & Canal Company, and for the period from 28 Dec 2006 - 10 Jan 2007, due to ice affected gage heights.

Through the entire WY07, outside staff gage readings did not agree with inside electric tape on ALL visits where both were read. The discrepancy covered a range in stage from 0.35' to 4.95' (E.T.). In the past there has been disagreement between the inside and outside reference gages at higher stages (~>2.5 ft) due to drawdown in the well and/or pile up on the staff gage. However, the problem in WY07 appears to be more widespread as it covered a full range in stage.

On October 22, 2007 (WY08), State Hydrographers went to the TWITUNCO gage to run levels and investigate the problem. It was confirmed that gage movement was not the source of the problem. After talking to the Twin Lakes Tunnel caretaker it was found that there is a drain in the stilling well that is used by the caretaker to move water through the stilling well to keep it from freezing. The adjustment of the drain valve clearly affects the inside gage height, especially at lower stages. It appears that the valve was used more in WY07 than in previous water years because the Twin Lakes Reservoir & Canal Company quit using a propane heater that they previously used to keep the well from freezing. The use of the valve makes all inside gage readings suspect because gage height is a function of valve adjustment. There is no record of the valve adjustment at any point in time during the water year.

At lower stages the outside gage height may have been more accurate than the inside gage. However, a datum correction cannot accurately be applied to correct the inside gage height because the correction would be a function of stage and valve adjustment, neither or which is known. The best course of action seems to be to work the record based on the inside gage height (gage of record) and rate the WY07 record 'poor'. For the WY07 record, lower inside gage heights will generally under-report the amount of water diverted through Twin Lakes Tunnel.

For the remainder of WY08, the caretaker has been instructed to operate the gage in such a manner that the outside and inside gages agree at lower stages. And, to completely avoid use of the drain valve during periods when stilling well freezing is not expected to be a problem (i.e., May 15 -Oct 31).

Additional high flow measurements are needed to better define shifts to the rating at medium and higher stages. Shifts to the rating occur due to excessive approach velocities and turbulence/ waves in the flume due to the approach section entering the flume at an angle. These problems are exacerbated in the gage height range of 2.5 ft to 4.5 ft. The high approach velocities and the extreme turbulence in the flume at highest stages (4.5 to 5.1 ft) appear to compensate for each other and result in the flume performing relatively close to the standard rating at the higher gage heights. Measurements and stage recording at the flume would benefit considerably from flow straightening and energy dissipation baffles installed upstream of the flume entrance.

Station maintained by L.R. Schultz and record developed by L.R. Schultz and M.A. Perry.

#### 09073000 TWIN LAKES TUNNEL AT EAST PORTAL NEAR TWIN LAKES, CO

RATING TABLE. -- STD12FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

#### DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP 22 40 31 10 7.6 4.6 8.7 184 304 248 46 41 9.1 4.6 2.0 19 12 5.5 342 168 51 137 4.3 31 2.3 2.4 3.5 29 19 8.5 5.3 217 421 149 62 4.3 4 61 23 17 5.9 4.8 7.6 6.1 203 394 159 5.0 35 5 63 31 14 15 3.1 3.9 9.1 142 436 131 52 1.9 .52 6 61 23 16 1.5 6.6 4.7 8.7 84 448 203 81 11 13 13 160 24 7.6 1.5 5.7 5.0 60 267 156 62 .52 17 15 8 150 2.7 5.5 5.6 63 53 213 94 77 9 111 9.9 12 15 7.9 3.7 245 111 58 .52 10 99 28 13 6.4 7.8 3.6 9.0 334 106 56 42 11 11 3.4 4.0 3.0 6.8 408 85 33 .52 252 12 110 3.7 7.7 2.0 3.8 6.7 461 81 21 .52 87 3.8 7.6 8.7 322 371 3.3 .52 13 11 2.0 2.6 7.6 14 63 29 3.8 2.8 4.8 8.7 285 403 89 76 .52 25 3.9 395 486 86 .52 15 61 5.3 5.4 6.8 8.7 12 25 4.0 7.5 7.1 7.9 337 16 1.5 8.1 524 82 97 .52 .53 17 5.3 2.4 4.0 7.5 4.8 7.4 6.7 364 513 78 78 .52 18 16 19 4.2 3.0 2.0 8.1 3.0 393 530 2.9 64 2.1 7.5 19 35 4.2 7.7 2.0 5.0 7.3 469 438 66 .52 20 7.9 11 4.2 6.7 5.8 4.3 3.5 493 409 57 71 4.1 10 21 123 20 7.1 5.4 5.1 7.5 420 398 159 46 13 22 77 11 1.5 3.7 5.1 16 21 375 332 151 2.8 25 22 23 42 2.0 18 3.0 7.9 8.5 242 323 114 3.5 35 24 25 11 10 3.0 7.9 8.2 24 184 352 79 40 44 16 25 53 29 4.0 3.0 5.8 159 340 71 26 50 29 7.5 5.2 5.3 10 171 266 53 39 37 7.6 21 217 39 23 21 6.8 4.5 218 68 17 32 28 36 21 24 311 109 30 37 24 8.2 4.0 5.4 48 70 29 20 6.9 3.6 52 356 382 21 22 26 24 ---30 35 20 21 9.5 \_\_\_ 8.7 94 266 199 72 39 13 22 7.9 ---------31 3.5 8.7 259 ---66 27 ---7552 TOTAL 1839.0 651.9 358.0 250.2 150.1 202.5 460.7 10866 3195 1483.3 454.29 15.1 MEAN 59.3 21.7 11.5 8.07 5.36 6.53 15.4 244 362 103 47.8 710 AC-FT 3650 1290 496 298 402 914 14980 21550 6340 2940 901 530 493 248 MAX 160 35 22 22 9.1 16 94 97 44

2.6

2.4

53

109

29

3.3

.52

.63 AC-FT CAL YR 2006 TOTAL 28490.42 MEAN 78.1 MAX 593 MIN 56510 78.1 MAX 530 MIN .52 AC-FT WTR YR 2007 TOTAL 27462.99 MEAN 54470

2.0

MAX DISCH: 604 CFS AT 11:00 ON Jun. 29, 2007 GH 4.95 FT. SHIFT 0 FT. MAX GH: 4.95 FT. AT 11:00 ON Jun. 29, 2007

2.3

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

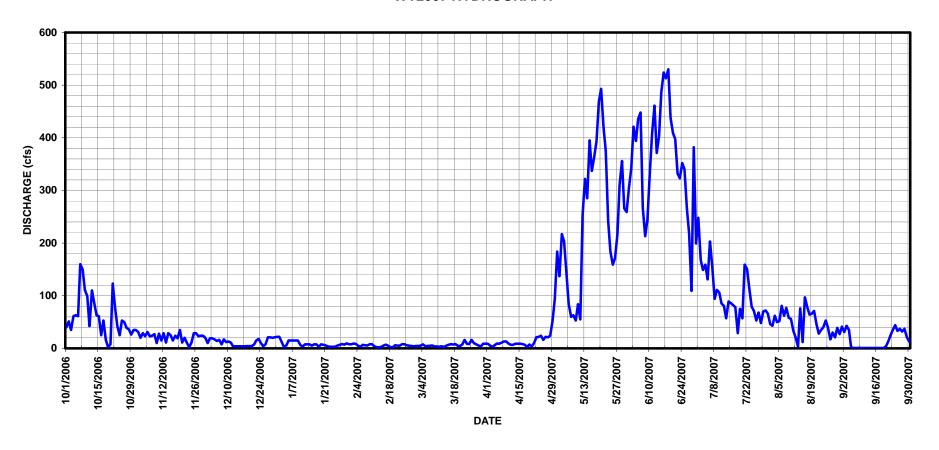
3.7

MIN

2.1

2.0

## 09073000 TWIN LAKES TUNNEL AT EAST PORTAL NEAR TWIN LAKES CO WY2007 HYDROGRAPH



(THIS PAGE INTENTIONALLY LEFT BLANK)

#### TRANSMOUNTAIN DIVERSION TO

#### ARKANSAS RIVER BASIN

### 09115000 LARKSPUR DITCH NEAR MARSHALL PASS, CO

LOCATION.--Lat 38°23'00", long 106°15'00", diverts water from tributaries of Tomichi Creek between headgates (in sec. 11, T.48 N., R.6 E., and sec. 1, T.47 N., R.6 E.), and Marshall Pass, in Gunnison River basin, to Poncha Creek (tributary to South Arkansas River) in SE4 sec. 24, T.48 N., R.6 E., in Arkansas River basin.

#### DRAINAGE AREA. --N/A

GAGE. -- Satellite-monitored data collection platform (high data rate Sutron SatLink Logger DCP) and SDR shaft encoder in a 30"x 24" metal shelter and well. Primary record is satellite-monitored data with the SDR record used for backup purposes. Primary reference gage is the outside staff gage in the flume. Control is a 2-foot steel Parshall Flume.

REMARKS.--The record is complete and fairly reliable, except for Oct. 4, 7-19, 2006, May 16-20, 22-24, 30, 31, June 7, 2007, when the channel and/ or flume was affected by ice. Record fair, except for periods of ice-affected record, which are poor. Station maintained and record developed by L.R. Schultz.

RATING TABLE. -- STD02FTPF USED FROM 01-OCT-2006 TO 30-SEP-2007

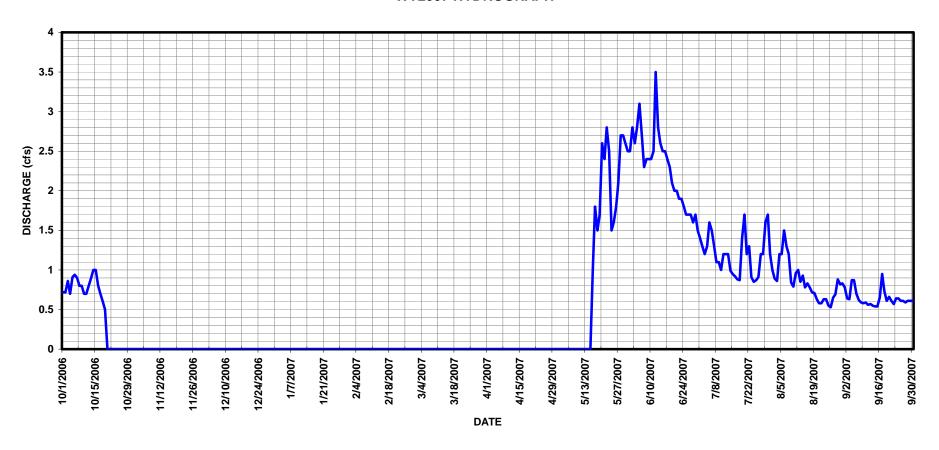
#### DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	0	0	0	0	0	0	0	2.5	1.4	1.0	.78
2	.72	0	0	0	0	Ō	0	0	2.8	1.3	.89	.64
3	.86	0	Ō	0	Ō	Ö	Ö	Ō	2.6	1.2	.86	.63
4	.70	0	0	0	0	0	0	0	2.8	1.3	1.2	.87
5	.91	0	0	0	0	0	0	0	3.1	1.6	1.2	.87
6	.94	0	0	0	0	0	0	0	2.7	1.5	1.5	.70
7	.90	0	0	0	0	0	0	0	2.3	1.3	1.3	.62
8	.80	0	0	0	0	0	0	0	2.4	1.1	1.2	.59
9	.80	0	0	0	0	0	0	0	2.4	1.1	.84	.58
10	.70	0	0	0	0	0	0	0	2.4	1.0	.79	.59
11	.70	0	0	0	0	0	0	0	2.5	1.2	.96	.56
12	.80	0	0	0	0	0	0	0	3.5	1.2	1.0	.57
13	.90	0	0	0	0	0	0	0	2.8	1.2	.85	.55
14	1.0	0	0	0	0	0	0	0	2.6	.99	.93	.54
15	1.0	0	0	0	0	0	0	0	2.5	.95	.78	.54
16	.80	0	0	0	0	0	0	1.0	2.5	.92	.83	.65
17	.70	0	0	0	0	0	0	1.8	2.4	.88	.78	.95
18	.60	0	0	0	0	0	0	1.5	2.3	.87	.72	.73
19	.50	0	0	0	0	0	0	1.7	2.1	1.4	.71	.61
20	0	0	0	0	0	0	0	2.6	2.0	1.7	.63	.66
21	0	0	0	0	0	0	0	2.4	2.0	1.2	.58	.61
22	0	0	0	0	0	0	0	2.8	1.9	1.3	.58	.57
23	0	0	0	0	0	0	0	2.5	1.9	.91	.63	.64
24	0	0	0	0	0	0	0	1.5	1.8	.85	.63	.64
25	0	0	0	0	0	0	0	1.6	1.7	.87	.55	.61
26	0	0	0	0	0	0	0	1.8	1.7	.91	.53	.61
27	0	0	0	0	0	0	0	2.1	1.7	1.2	.65	.59
28	0	0	0	0	0	0	0	2.7	1.6	1.2	.69	.61
29	0	0	0	0		0	0	2.7	1.7	1.6	.88	.61
30	0	0	0	0		0	0	2.6	1.5	1.7	.82	.61
31	0		0	0		0		2.5		1.2	.83	
TOTAL	15.05	0	0	0	0	0	0	33.8	68.7	37.05	26.34	19.33
MEAN	.49	0	0	0	0	0	0	1.09	2.29	1.20	.85	.64
AC-FT	30	0	0	0	0	0	0	67	136	73	52	38
MAX	1.0	0	0	0	0	0	0	2.8	3.5	1.7	1.5	.95
MIN	0	0	0	0	0	0	0	0	1.5	.85	.53	.54
CAL YR WTR YR	2006 2007	TOTAL TOTAL	126.65 MEA 200.27 MEA		.35 MAX	2.3			AC-FT AC-FT	251 397		
AA T I/ T I/	2007	TOIVI	200.21 MEA	LV	.JJ IMA	٥.٥	1,1 T IA	U	AC LI	331		

MAX DISCH: 4.81 CFS AT 13:15 ON Jun. 12, 2007 GH 0.72 FT. SHIFT 0 FT. MAX GH: 0.72 FT. AT 13:15 ON Jun. 12, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 09115000 LARKSPUR DITCH NEAR MARSHALL PASS CO WY2007 HYDROGRAPH



#### 08213500 RIO GRANDE AT THIRTYMILE BRIDGE, NEAR CREEDE, CO

LOCATION.--Lat 37°43'29", long 107°15'18", in NE4 sec. 13, T.40 N., R.4 W., Hinsdale County, Hydrologic Unit 13010001, on right bank 70 ft downstream from bridge, 500 ft upstream from Squaw Creek, 0.8 mi downstream from Rio Grande Reservoir, and 20 mi southwest of Creede.

DRAINAGE AREA AND PERIOD OF RECORD.--163 mi<sup>2</sup>. June 1909 to Sep. 1923, May 1925 to current year. No winter records 1910, 1926. Monthly data only for some periods.

GAGE.--Graphic water-stage recorder and shaft encoder with satellite telemetry in a timber shelter and metal well. Elevation of gage is 9,300 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record is complete and reliable, except for Nov. 7, 2006 to April 2, 2007, when the station was closed for the winter; Oct.31, Nov. 1 - 6, 2006, April 3 - 6, 2007, when the station was isolated; and April 13-16, 2007, when the well was frozen. Record good, except for periods of no gage-height record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

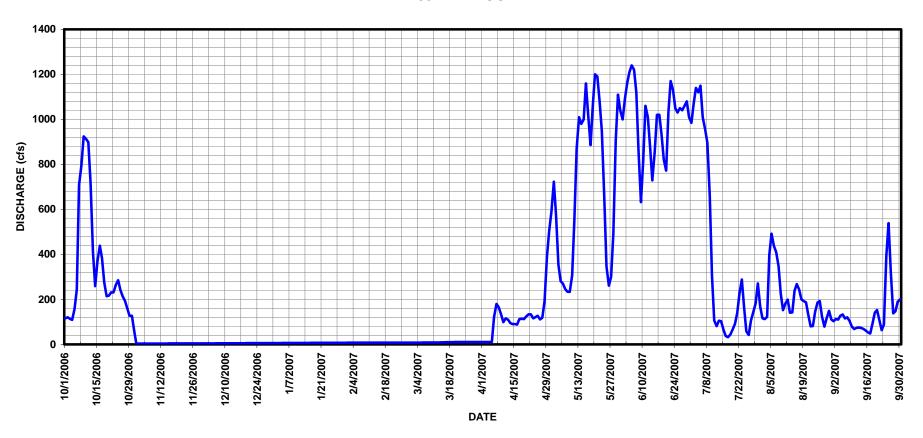
RATING TABLE. -- RIOMILCO12 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	3.6	4.6	6.0	7.6	8.0	11	590	1000	985	116	103
2	120	3.6	4.6	6.0	7.6	8.0	11	723	1090	1070	112	113
3	114	3.6	4.6	6.0	7.6	8.0	11	572	1160	1140	122	110
4	109	3.6	4.6	6.2	7.6	8.0	11	355	1210	1120	396	127
5	158	3.6	4.6	6.2	7.8	8.0	11	281	1240	1150	492	133
6	244	3.6		6.2	7.8	8.2	122	270	1220	1010	437	115
7	708	3.6		6.2	7.8	8.2	180	245	1120	956	410	120
8	797	3.6		6.4	7.8	8.2	165	234	856	896	348	104
9	924	3.6		6.4	7.8	8.2	135	233	632	662	223	79
10	914	3.6		6.4	7.8	8.2	99	307	816	303	152	68
11	899	3.8		6.4	7.8	8.4	115	557	1060	106	182	73
12	718	3.8		6.6	7.8	8.6	110	869	1010	81	199	75
13	410	3.8			7.8	8.8	95	1010	879	105	141	73
14	259	3.8			7.8	9.0	90	980	729	103	142	69
15	369	4.0			7.8	9.2	90	1000	856	65	239	62
16	439	4.0			7.8	9.6	88	1160	1020	37	268	53
17	383	4.0			7.8	9.8	112	1020	1020	32	243	48
18	275	4.0			7.8	10	114	885	930	44	200	92
19	214	4.0			7.8	10	112	1060	822	66	192	141
20	217	4.0		7.0	7.8	11	124	1200	772	91	187	153
21	231	4.2		7.0	8.0	11	134	1190	1030	139	132	107
22	231	4.2		7.0	8.0	11	134	1080	1170	225	80	63
23	264	4.2		7.0	8.0	11	116	948	1130	288	82	88
24	285	4.2		7.2	8.0	11	121	658	1050	166	144	392
25	242	4.2		7.2	8.0	11	127	346	1030	58	186	539
26	214	4.4		7.2	8.0	11	111	261	1050	42	193	323
27	193	4.4		7.2	8.0	11	119	301	1040	106	124	138
28 29	160	4.4		7.4 7.4	8.0	11 11	192 390	493 909	1060 1080	142 181	79 116	147 189
	127	4.4								271		
30 31	127 61	4.4	5.8 6.0	7.4 7.4		11 11	505	1110 1040	1010	167	149 111	200
31	0.1		0.0	7.4		11		1040		101	111	
TOTAL	10522	118.2	161.0	208.4	219.2	296.4	3755	21887	30092	11807	6197	4097
MEAN	339	3.94	5.19	6.72	7.83	9.56	125	706	1003	381	200	137
AC-FT	20870	234	319	413	435	588	7450	43410	59690	23420	12290	8130
MAX	924	4.4	6.0	7.4	8.0	11	505	1200	1240	1150	492	539
MIN	61	3.6	4.6	6.0	7.6	8.0	11	233	632	32	79	48
CAL YR	2006	TOTAL	70927	MEAN	194 MAX	1180	MIN	3.6	AC-FT	140700		
WTR YR	2007	TOTAL	89360.2	MEAN	245 MAX	1240	MIN	3.6	AC-FT	177200		

MAX DISCH: 1260 CFS AT 01:00 ON Jun. 6, 2007 GH 3.61 FT. GH CORR. 0.01 FT. SHIFT 0.09 FT. MAX GH: 3.62 FT. (GH CORR. 0.01 FT. APPLIED) AT 01:00 ON Jun. 6, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08213500 RIO GRANDE AT THIRTYMILE BRIDGE, NEAR CREEDE CO WY2007 HYDROGRAPH



#### 08214500 NORTH CLEAR CREEK BELOW CONTINENTAL RESERVOIR, CO

LOCATION.--Lat 37°53'18", long 107°12'10", in NE4sW4 sec. 21, T.42 N., R.3 W., Hinsdale County, Hydrologic Unit 13010001, on left bank 100 ft downstream from bridge, 1,000 ft downstream from Continental Reservoir, and 15 mi west of Creede.

DRAINAGE AREA. -- 51.7 mi<sup>2</sup>.

GAGE.--Graphic water-stage recorder, shaft encoder, and a Sutron satellite monitoring system in a 4 ft. by 4 ft. timber shelter and concrete well at a concrete ramp flume. Elevation of gage is 10,200 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record is complete and reliable, except for Nov. 7, 2006 through April 2, 2007, when the station was closed for the winter, and the periods: May 1-3, 20-22, July 3-7, 2007, when gage height was not representative of average flow due to critical flow conditions at the gage. Record is good, except for periods of no gage-height record, and periods when the gage height was not representative of the average flow, which are fair to poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

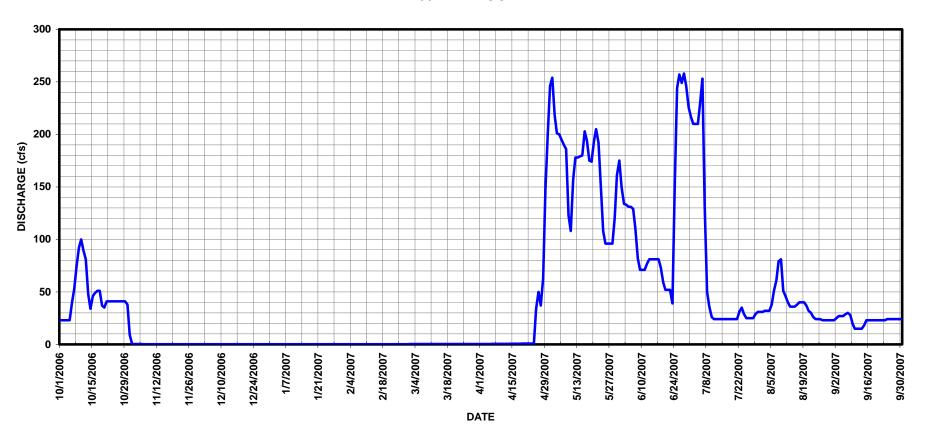
RATING TABLE. -- NCLCONCO22 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCIII	ANOD, IN C	ME	AN VALUI		10 00111	INDDIK 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	.27	.19	.20	.22	.23	.24	246	150	217	31	23
2	23	.25	.19	.20	.22	.23	.24	254	134	210	32	25
3	23	.25	.19	.20	.22	.23	.27	218	133	210	32	27
4	23	.25		.20	.22	.23	.31	201	131	210	32	27
5	23	.23		.20	.22	.23	.35	200	131	229	38	27
6	40	.22			.22	.23	.39	195	129	253	51	29
7	53	.18		.20	.22	.23	.43	190	110	132	61	30
8	74	.18			.22	.23	.46	186	82	50	79	28
9	92	.18			.22	.23	.51	123	71	36	81	20
10	100	.18			.22	.23	.53	108	71	26	51	15
11	89	.18			.22	.23	.53	157	71	24	46	15
12	81	.18		.20	.22	.23	.52	178	77	24	40	15
13	48	.18		.20	.22	.23	.52	178	81	24	36	15
14	34	.18			.22	.23	.57	179	81	24	36	18
15	46	.18			.22	.23	.61	180	81	24	36	23
16	49	.18			.22	.24	.63	203	81	24	38	23
17	51	.18		.21	.22	.24	.63	194	81	24	40	23
18	51	.18		.21	.22	.24	.68	175	73	24	40	23
19	37	.18		.21	.22	.24	.75	174	59	24	40	23
20	35	.18		.21	.22	.24	.75	193	52	24	37	23
21	41	.18			.22	.24	.75	205	52	24	32	23
22	41	.18			.22	.24	.74	192	52	31	30	23
23	41	.18		.21	.22	.24	.75	152	39	35	26	23
24	41	.18		.21	.22	.24	.78	108	148	29	24	24
25	41	.18		.21	.22	.24	34	96	244	25	24	24
26	41	.18		.21	.22	.24	50	96	257	25	24	24
27	41	.18		.21	.22	.24	37	96	249	25	23	24
28	41	.18			.22	.24	63	96	258	25	23	24
29	41	.18		.21		.24	147	120	246	29	23	24
30	38	.18				.24	201	161	226	31	23	24
31	9.1		.20	.21		.24		175		31	23	
TOTAL	1411.1	5.79	6.05	6.36	6.16	7.29	544.94	5229	3650	2123	1152	689
MEAN	45.5	.19	.20	.21	.22	.24	18.2	169	122	68.5	37.2	23.0
AC-FT	2800	11	12	13	12	14	1080	10370	7240	4210	2280	1370
MAX	100	.27	.20	.21	.22	.24	201	254	258	253	81	30
MIN	9.1	.18	.19	.20	.22	.23	.24	96	39	24	23	15
CAL YR	2006	TOTAL	9488.52	MEAN	26.0 MAX	2:	14 MIN	.18	AC-FT	18820		
WTR YR			14830.69		40.6 MAX		58 MIN		AC-FT	29420		

MAX DISCH: 276 CFS AT 09:45 ON May. 1, 2007 GH 2.8 FT. SHIFT -0.01 FT. MAX GH: 2.8 FT. AT 09:45 ON May. 1, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

### 08214500 NORTH CLEAR CREEK BELOW CONTINENTAL RESERVOIR CO WY2007 HYDROGRAPH



#### 08217500 RIO GRANDE RIVER at WAGONWHEEL GAP, CO.

LOCATION.--Lat 37°46'01", long 106°49'51", in NW1/4 NE1/4 sec. 35, T. 41N, R. 1E., Mineral County, Hydrologic unit 13010001, on left bank 40 ft. downstream from private bridge, 0.3 mi. upstream from Goose Creek, and 0.3 mi. west of town of Wagonwheel Gap.

DRAINAGE AREA. -- 780 mi<sup>2</sup>.

GAGE.--Graphic water-stage recorder, shaft encoder, and Sutron satellite monitoring system in 4 ft. by 4 ft. timber shelter and 4 ft. diameter concrete well. Altitude of gage 8,430 ft. from topographic map. A cableway is located approximately 350 ft. upstream of the gage.

REMARKS.--Record is complete and reliable, except for Nov. 27, 2006 through Mar. 21, 2007, when the station was closed for the winter. Record is good, except for periods of no gage height record, which should be considered poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

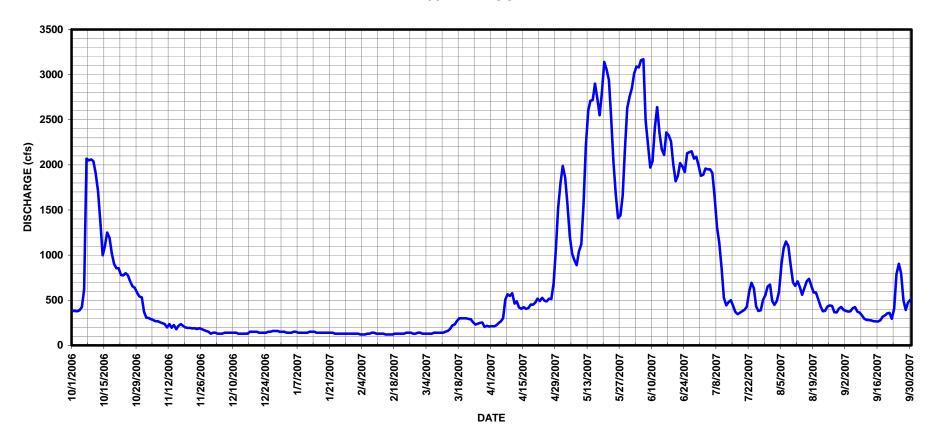
RATING TABLE. -- RIOWAGCO04 USED FROM 01-OCT-2006 TO 30-SEP-2007

MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	381	373	140	150	130	140	212	1800	2850	1880	493	392	
2	381	306	140	140	130	130	210	1990	3010	1890	449	381	
3	378	303	130	140	120	130	219	1860	3090	1960	493	374	
4	388	290	130	140	120	130	244	1570	3080	1950	597	377	
5	423	281	130	150	120	130	264	1210	3160	1950	902	412	
6	618	267	140	150	130	130	299	1020	3170	1910	1080	424	
7	2070	267	140	140	130	140	507	946	2490	1630	1150	374	
8	2050	256	140	140	140	140	566	888	2220	1310	1100	362	
9	2060	246	140	140	140	140	547	1040	1970	1140	896	331	
10	2040	236	140	140	130	140	578	1120	2040	851	698	294	
11	1910	199	140	140	130	140	462	1570	2420	527	660	282	
12	1710	236	130		130	150	487	2200	2640	443	709	281	
13	1380	195	130		130	160	420	2600	2350	479	643	276	
14	998	225	130	150	120	180	404	2710	2170	500	560	268	
15	1100	179	130		120	220	424	2720	2110	436	639	266	
16	1250	216	130		120	230	404	2900	2360	369	711	265	
17	1190	235	150		120	270	411	2730	2330	346	737	279	
18	1020	215	150		130	300	452	2550	2260	362	662	317	
19	901	199	150		130	300	450	2800	2010	380	587	331	
20	854	194	150	140	130	300	471	3140	1820	395	585	354	
21	855	193	140	140	130	300	517	3060	1880	429	512	360	
22	780	188	140		130	292	491	2940	2020	597	430	294	
23	775	189	140		140	289	527	2520	1980	693	377	410	
2.4	800	180	140	130	140	256	494	2040	1920	633	383	785	
25	777	190	150		140	231	488	1670	2130	433	431	905	
26	706	181	150		130	239	518	1410	2140	382	444	800	
27	655	170	160		130	248	513	1440	2150	389	437	498	
28	639	160	160		140	254	689	1660	2070	501	367	391	
29	581	150	160	130		204	1070	2170	2090	557	365	473	
30	541	130	150	130		216	1520	2630	1990	652	408	504	
31	532		150	130		207		2750		674	425		
TOTAL	30743	6649	4400	4310	3630	6336	14858	63654	69920	26648	18930	12060	
MEAN	992	222	142	139	130	204	495	2053	2331	860	611	402	
AC-FT	60980	13190	8730		7200	12570	29470	126300	138700	52860	37550	23920	
MAX	2070	373	160		140	300	1520	3140	3170	1960	1150	905	
MIN	378	130	130	130	120	130	210	888	1820	346	365	265	
CAL YR	2006	TOTAL	195211	MEAN	535 MAX	231		104	AC-FT	387200			
WTR YR	2007	TOTAL	262138	MEAN	718 MAX	317	70 MIN	120	AC-FT	520000			

MAX DISCH: 3530 CFS AT 04:15 ON Jun. 6, 2007 GH 4.42 FT. SHIFT 0.11 FT. MAX GH: 4.42 FT. AT 04:15 ON Jun. 6, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08217500 RIO GRANDE RIVER at WAGONWHEEL GAP CO WY2007 HYDROGRAPH



#### 08218500 GOOSE CREEK AT WAGONWHEEL GAP, CO

LOCATION.--Lat 37°45'07", long 106°49'46", in SW4SE4 sec. 35, T.41 N., R.1 E., Mineral County, Hydrologic Unit 13010001, on left bank 0.2 mi downstream from Pierce Creek, 1.0 mi upstream from mouth, 1.0 mi south of Wagonwheel Gap, and 8.8 mi southeast of Creede.

DRAINAGE AREA. -- 90 mi<sup>2</sup>.

GAGE.--Graphic water-stage recorder, shaft encoder and Sutron data collection platform with satellite transmitter in 36-inch corrugated pipe shelter and smooth steel pipe well. Supplemental outside cantilever chain gage (not in use). Elevation of gage is 8,460 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record is complete and reliable, except for the following periods: December 13-26, 2006, when floats were affected by ice in well, and December 27, 2006 through March 21, 2007 when station was closed for the winter. Stage-discharge relation was affected by ice October 27, November 11 - December 12, 2006. Record is good, except for periods of no gage height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

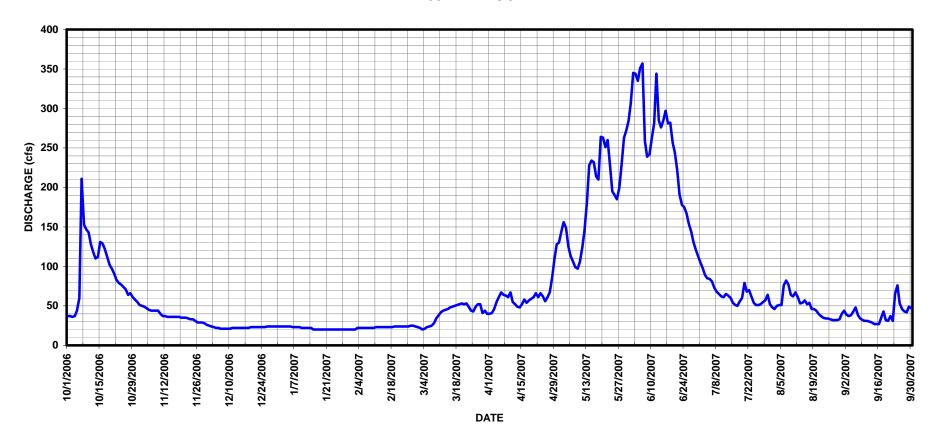
RATING TABLE.--GOOWAGCO09 USED FROM 01-OCT-2006 TO 30-SEP-2007

			2100111		ME	AN VALUES	3211 2000	10 02111				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	51	25	24	20	23	40	130	307	105	48	44
2	37	50	24	24	20	22	41	144	345	98	46	39
3	36	49	23	24	22	20	46	156	344	89	50	37
4	37	47	22	24	22	21	55	149	335	85	51	38
5	44	45	22	24	22	23	61	125	351	84	51	43
6	60	44	21	23	22	24	67	113	357	81	76	48
7	211	44	21	23	22	25	64	106	259	73	82	38
8	153	44	21	23	22	28	63	99	239	68	77	34
9	147	44	21	23	22	34	61	97	242	65	64	32
10	143	40	21	22	22	38	67	106	262	62	62	31
11	128	37	22	22	23	42	55	124	281	61	67	31
12	118	37	22	22	23	44	52	146	344	65	61	30
13	110	36	22	22	23	45	49	182	285	63	53	29
14	112	36	22	22	23	46	48	228	276	60	54	27
15	131	36	22	20	23	48	52	234	285	54	57	27
16	129	36	22	20	23	49	58	232	297	51	52	27
17	122	36	22	20	23	50	54	214	281	50	54	35
18	112	36	22	20	23	51	57	210	282	56	46	43
19	102	35	23	20	24	52	59	264	257	60	46	32
20	97 91	35 35	23 23	20 20	24	53	61	263	244 221	79 68	4 4 4 0	31 37
21	83	33	23	20	24 24	52 53	66 61	251 260	191	70	37	31
22 23	83 79	34	23	20	24	53 49	66	200	178	62	37	65
23	79	33	23	20	24	49	62	195	175	54	34	76
25	74	31	23	20	24	43	56	190	167	51	34	53
26	71	29	24	20	25	49	61	185	154	51	33	46
27	64	29	24	20	25	52	67	200	144	52	32	43
28	66	29	24	20	24	52	86	229	131	55	32	42
29	61	28	24	20		41	108	263	121	57	32	49
30	58	26	24	20		44	128	272	113	64	33	47
31	55		24	20		40		284		52	40	
TOTAL	2845	1125	702	662	642	1257	1871	5878	7468	2045	1523	1185
MEAN	91.8	37.5	22.6	21.4	22.9	40.5	62.4	190	249	66.0	49.1	39.5
AC-FT	5640	2230	1390	1310	1270	2490	3710	11660	14810	4060	3020	2350
MAX	211	51	25	24	25	53	128	284	357	105	82	76
MIN	36	26	21	20	20	20	40	97	113	50	32	27
CAL YR	2006	TOTAL	20929	MEAN	57.3 MAX	222	2 MIN	13	AC-FT	41510		
WTR YR	2007	TOTAL	27203	MEAN	74.5 MAX	357	7 MIN	20	AC-FT	53960		

MAX DISCH: 456 CFS AT 22:30 ON Jun. 5, 2007 GH 3.87 FT. SHIFT -0.04 FT. MAX GH: 3.87 FT. AT 22:30 ON Jun. 5, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

### 08218500 GOOSE CREEK AT WAGONWHEEL GAP CO WY2007 HYDROGRAPH



### 08219500 SOUTH FORK RIO GRANDE AT SOUTH FORK, CO

LOCATION.--Lat 37°39'25", long 106°38'55", in SW4NE4 sec. 3, T.39 N., R.3 E., Rio Grande County, Hydrologic Unit 13010001, on left bank near U.S. Highway 160, 0.1 mile downstream from Church Creek, 0.9 mi southwest of village of South Fork, and 1.5 mi upstream from mouth.

DRAINAGE AREA AND PERIOD OF RECORD.--216 mi<sup>2</sup>. Station established May 17, 1909 at different site with minimal records. Non-recording to 1910 when water-stage recorder installed. Moved to current site in May 1936.

GAGE.--Graphic water-stage recorder, shaft encoder, and Sutron satellite monitoring system with an air temperature sensor and a tipping bucket rain gage in a timber shelter and corrugated metal pipe well. Datum of gage is 8,221.79 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record is complete and reliable, except November 27, 2006 through March 21, 2007, when the station was closed for the winter. Stage-discharge relation was affected by ice Nov. 16-26, 2006. Record is good, except for periods of no gage-height record and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

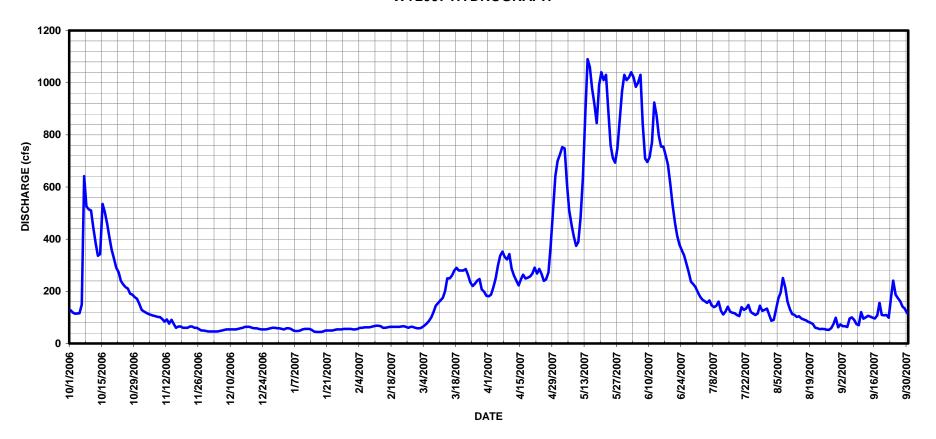
RATING TABLE. -- RIOSFKCO10 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE	, IN CFS		YEAR OCTO		TO SEPTE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	129	46	56	54	58	181	700	1020	196	110	73
2	119	123	46	54	54	58	187	725	1040	179	87	66
3	114	118	46	58	56	62	214	753	1020	168	91	66
4	115	113	46	58	60	68	250	748	984	162	130	63
5	116	110	48	56	60	76	298	617	1000	156	173	96
6	149	107	50	50	62	86	336	512	1030	165	195	100
7	642	105	52	48	62	100	352	456	842	146	251	90
8	526	102	54 54	48 50	62	120	332	411 374	709	139	214 160	74
9 10	515 510	101 94	54	50 54	64 66	145 155	322 343	374	696 715	144 161	131	70 120
11	445	94 84	54	54 56	68	165	287	482	715	125	113	95
12	384	92	54	56	68	175	260	640	924	111	110	100
13	336	76	56	56	66	200	242	869	875	122	102	106
14	343	91	58	52	60	250	223	1090	797	141	104	103
15	535	75	60	46	60	250	246	1060	755	122	96	99
16	504	60	64	44	62	260	264	978	754	118	92	96
17	458	65	64	44	64	280	249	916	721	116	89	108
18	406	65	64	44	64	290	252	845	686	109	83	156
19	359	60	60	46	64	280	257	991	611	105	80	109
20	324	60	58	50	64	280	268	1040	532	139	75	108
21	291	60	58	50	64	280	291	1010	463	129	61	109
22	273	65	56	50	65	285	268	1030	413	134	58	99
23	240	65	54	50	66	263	286	897	379	148	55	175
24	227	60	54	52	64	235	266	759	357	121	56	241
25	216	60	54	54	60	220	240	711	338	115	55	187
26	211	55	56	54	64	229	246	693	305	109	53	174
27	191	50	58	54	64	241	273	750	273	115	52	162
28	187	50	60	56	60	247	377	855	237	145	59	142
29	178	48	60	56		207	514	968	227	125	75	134
30	171		58 58	56 56		198	642	1030	216	129	99	116
31	152		58	56		183		1010		134	62	
TOTAL	9365	2389	1714	1614	1747	5946	8766	24309	19690	4228	3171	3437
MEAN	302	79.6	55.3	52.1	62.4	192	292	784	656	136	102	115
AC-FT	18580	4740	3400	3200	3470	11790	17390	48220	39060	8390	6290	6820
MAX	642	129	64	58	68	290	642	1090	1040	196	251	241
MIN	114	46	46	44	54	58	181	374	216	105	52	63
CAL YR	2006	TOTAL	65961 MEA	N	181 MAX	97	9 MIN	23	AC-FT	130830		
WTR YR	2007	TOTAL	86376 MEA		237 MAX				AC-FT	171300		

MAX DISCH: 1190 CFS AT 23:45 ON May. 14, 2007 GH 4.73 FT. SHIFT -0.19 FT. MAX GH: 4.73 FT. AT 23:45 ON May. 14, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

### 08219500 SOUTH FORK RIO GRANDE AT SOUTH FORK CO WY2007 HYDROGRAPH



#### 08220000 RIO GRANDE RIVER NEAR DEL NORTE, CO

LOCATION.--Lat 37°41'22", long 106°27'38", in NW4 sec. 29, T.40 N., R.5 E., Rio Grande County, Hydrologic Unit 13010001, on right bank 20 ft downstream from county highway bridge, 6.0 mi west of Del Norte, and 5 mi upstream from Pinos Creek.

DRAINAGE AREA AND PERIOD OF RECORD.--1,320 mi<sup>2</sup>. Measurements and staff gages with frequent readings begun in June of 1889. Various sites used until present site established in Nov. 1910, with a recorder installed in 1934. All missing periods have been estimated and discharge records are complete from July 1, 1889.

GAGE.--Graphic water-stage recorder, shaft encoder, and a Sutron satellite monitoring system in a 6 ft. by 6 ft. exposed aggregate concrete shelter and 4 ft. diameter concrete well. The satellite monitoring system collects gage height, air temperature, rainfall (tipping bucket), and water temperature data, and also has a modem system to provide gage heights via a dial-in option. Gage datum is 7,980.25 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record is complete and reliable, except for Feb. 3-16, 2007, when floats were affected by ice in well.

Chart data were used from Jan. 18 to Feb. 2, 2007, when shaft encoder float was affected by ice. The stage-discharge relation was affected by ice Nov. 28, 2006 through Feb. 2, 2007, and Feb. 17 through Mar. 18, 2007. Record is good, except for periods of no gage-height and ice affected record, which should be considered poor. Station maintained and record developed by Div. III Hydrographic Staff.

**RATING TABLE.**—RIODELCO03 USED FROM 01-OCT-2006 TO 15-MAR-2007 RIODELCO04 USED FROM 15-MAR-2007 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
MEAN VALUES

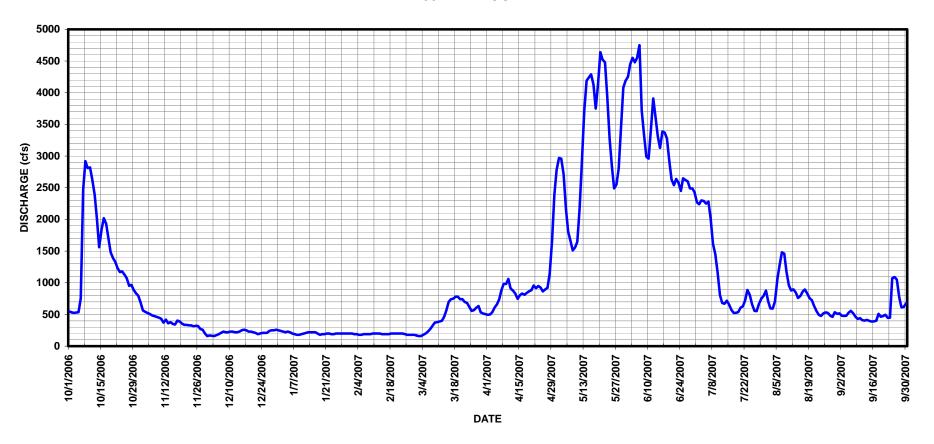
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	547	684	170	240	200	170	495	2780	4250	2270	707	517
2	533	564	165	230	190	160	501	2970	4450	2240	597	480
3	524	542	160	220	190	160	535	2960	4550	2300	594	477
4	531	522	175	230	180	180	611	2710	4480	2290	710	481
5	535	507	190	220	180	200	660	2180	4550	2250	1060	528
6	756	484	210	200	190	230	738	1810	4750	2280	1280	559
7	2470	476	230	190	190	270	886	1660	3720	2010	1480	517
8	2920	461	220	180	190	320	985	1510	3320	1620	1460	464
9	2810	450	220	180	190	370	983	1560	2990	1450	1170	430
10	2820	432	230	190	200	380	1060	1650	2960	1170	958	442
11	2630	372	230	200	200	390	909	2160	3440	806	878	408
12	2390	418	220	210	200	400	876	2930	3910	681	897	403
13	2010	362	220	220	200	460	832	3700	3610	668	845	413
14	1560	378	230	220	190	560	748	4190	3310	718	761	400
15	1840	350	250	220	190	700	802	4240	3130	656	793	390
16	2020	342	260	220	190	740	831	4290	3390	572	861	391
17	1930	404	250	200	190	750	810	4130	3370	525	894	402
18	1700	389	230	180	200	780	840	3750	3280	524	829	510
19	1480	355	230	190	200	781	866	4150	2920	539	761	465
20	1390	336	220	190	200	740	883	4640	2630	606	725	476
21	1330	337	210	200	200	742	958	4520	2540	628	635	496
22	1230	329	190	200	200	698	913	4480	2640	726	558	446
23	1170	328	200	190	200	684	949	3940	2580	886	495	449
24	1180	313	210	190	190	621	925	3270	2450	808	477	1070
25	1130	321	210	200	180	555	864	2840	2650	662	518	1090
26	1070	318	210	200	180	568	895	2490	2620	557	533	1050
27	953	269	240	200	180	606	920	2550	2600	553	524	769
28	966	260	250	200	180	635	1150	2800	2490	663	480	610
29	888	200	250	200		532	1680	3470	2490	749	461	619
30	833	160	260	200		515	2390	4080	2430	792	536	678
31	795		250	200		505		4190		876	510	
TOTAL	44941	11663	6790	6310	5370	15402	27495	98600	98500	34075	23987	16430
MEAN	1450	389	219	204	192	497	917	3181	3283	1099	774	548
AC-FT	89140	23130	13470	12520	10650	30550	54540	195600	195400	67590	47580	32590
MAX	2920	684	260	240	200	781	2390	4640	4750	2300	1480	1090
MIN	524	160	160	180	180	160	495	1510	2430	524	461	390
CAT VD	2006	TOTAT	287163	MEAN	700 MAV	3/1/	1∩ MTN	140	7.C-ET	570200		

CAL YR 2006 TOTAL 287463 MEAN 788 MAX 3440 MIN 140 AC-FT 570200 WTR YR 2007 TOTAL 389563 MEAN 1067 MAX 4750 MIN 160 AC-FT 772700

MAX DISCH: 5180 CFS AT 09:00 ON Jun. 6, 2007 GH 4.40 FT. SHIFT 0.02 FT. MAX GH: 4.40 FT. AT 09:00 ON Jun. 6, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08220000 RIO GRANDE RIVER NEAR DEL NORTE CO WY2007 HYDROGRAPH



#### 08220500 PINOS CREEK NEAR DEL NORTE, CO

LOCATION.--Lat 37°26'51", long 106°27'05", in SW4SE4 sec. 29, T.39 N., R.5 E., Rio Grande County, Hydrologic Unit 13010002, on left bank 200 ft. downstream from Bennett Creek and 8.0 mi. southwest of Del Norte, Co.

DRAINAGE AREA. -- 53 mi².

GAGE.--Graphic water-stage recorder, shaft encoder, and Sutron satellite monitoring system in a 3 ft. by 3 ft. timber shelter and concrete well at a 12 ft. rectangular concrete box control. Altitude of gage is 8,480 ft. from topographic map.

REMARKS.--Record is complete and reliable, except for November 27, 2006 through March 21, 2007, when the station was closed for the winter. Stage-discharge relation was affected by ice November 1, 2, 11, 13, 15, 19-26, 2006 and March 29, 30, 2007. Record is good, except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

RATING TABLE. -- PINDELCO14 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE	, IN CFS	, WATER Y	EAR OCTOB AN VALUES	ER 2006 I	O SEPTE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	12	6.0	5.0	6.0	7.0	23	88	178	39	17	15
2	10	12	6.0	5.0	6.0	7.0	24	108	171	35	15	15
3	9.9	14	8.0	5.0	7.0	7.0	27	109	161	30	18	15
4	9.8	13	8.0	7.0	7.0	8.0	34	110	160	30	29	14
5	9.6	14	9.0	7.0	7.0	9.0	40	93	166	30	27	18
6	11	14	9.0	7.0	8.0	10	46	84	159	28	22	17
7	32	13	9.0	6.0	8.0	14	48	81	136	27	34	14
8	24	13	9.0	6.0	8.0	17	42	68	124	26	37	13
9	24	13	9.0	6.0	8.0	20	39	65	123	26	23	13
10	23	11	9.0	7.0	9.0	23	39	74	120	25	22	23
11	19	9.0	9.0	7.0	9.0	25	35	95	119	25	22	18
12	17	13	9.0	9.0	9.0	28	33	110	146	25	22	17
13	16	12	9.0	9.0	8.0	30	29	133	129	26	27	14
14	18	14	10	8.0	8.0	32	31	166	118	26	32	13
15	32	12	10	6.0	7.0	32	29	166	113	23	37	13
16	26	14	11	5.0	8.0	33	33	163	109	21	42	12
17	23	14	11	4.0	8.0	33	33	152	100	21	31	17
18	19	14	10	4.0	8.0	33	34	145	93	22	27	21
19	17	12	10	4.0	9.0	32	38	157	83	21	25	14
20	18	12	9.0	5.0	9.0	31	40	161	77	26	23	13
21	18	12	6.0	6.0	9.0	30	44	172	71	21	21	14
22	15	12	4.0	6.0	9.0	29	42	184	67	21	21	12
23	16	12	4.0	6.0	9.0	27	48	165	64	19	19	17
24	16	11	4.0	6.0	8.0	25	44	147	65	17	19	21
25	15	11	5.0	6.0	9.0	24	37	140	62	16	18	14
26	14	11	5.0	6.0	9.0	26	39	139	59	18	18	13
27	15	10	6.0	6.0	9.0	30	42	147	54	20	18	13
28	17	10	6.0	6.0	8.0	32	58	164	50	20	20	13
29	15	6.0	6.0	6.0		27	75	183	47	28	18	17
30	14	6.0	6.0	6.0		26	87	181	44	29	20	15
31	13		5.0	6.0		25		175		20	16	
TOTAL	536.3	356.0	237.0	188.0	227.0	732.0	1213	4125	3168	761	740	458
MEAN	17.3	11.9	7.65	6.06	8.11	23.6	40.4	133	106	24.5	23.9	15.3
AC-FT	1060	706	470	373	450	1450	2410	8180	6280	1510	1470	908
MAX	32	14	11	9.0	9.0	33	87	184	178	39	42	23
MIN	9.6	6.0	4.0	4.0	6.0	7.0	23	65	44	16	15	12
CAL YR	2006	TOTAL	8016.8 MEA	N 2	1.9 MAX	112	MIN	3.7	AC-FT	15900		

MAX DISCH: 214 CFS AT 22:00 ON May. 21, 2007 GH 2.1 FT. SHIFT 0.09 FT. MAX GH: 2.1 FT. AT 22:00 ON May. 21, 2007

34.9 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

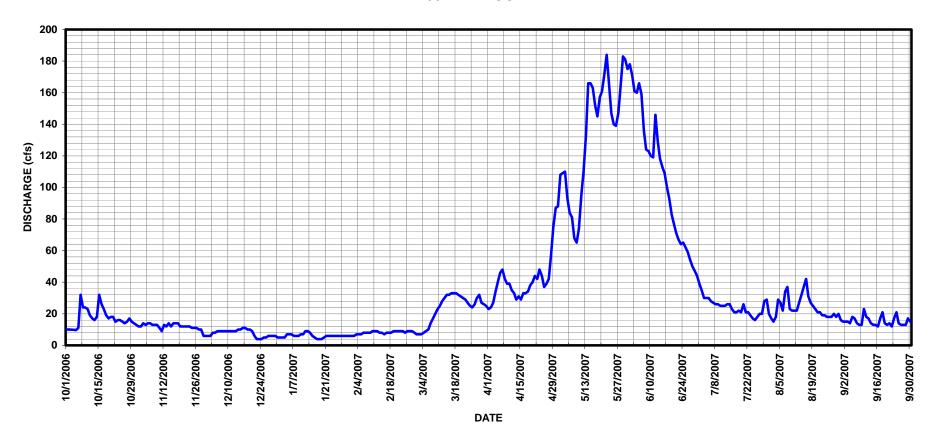
TOTAL 12741.3 MEAN

WTR YR 2007

184 MTN

4 AC-FT 25270

## 08220500 PINOS CREEK NEAR DEL NORTE CO WY2007 HYDROGRAPH



#### 08221500 RIO GRANDE NEAR MONTE VISTA, CO

LOCATION.--Lat 37°36'34", long 106°08'54", in NW4SW4 sec. 19, T.39 N., R.8 E., Rio Grande County, Hydrographic Unit 13010002, on left bank 40 ft. downstream from bridge on U.S. Highway 285, 2.0 mi. north of Monte Vista, and 12 mi. downstream from San Francisco Creek.

DRAINAGE AREA. -- 1,590 mi<sup>2</sup>.

REMARKS.--Record is complete and reliable, except for Nov. 30, 2006 through Mar. 8, 2007, when the station was closed for winter. Stage-discharge relation was affected by ice Mar. 9-16, 2007. Record is good, except for periods of no gage-height and ice-affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

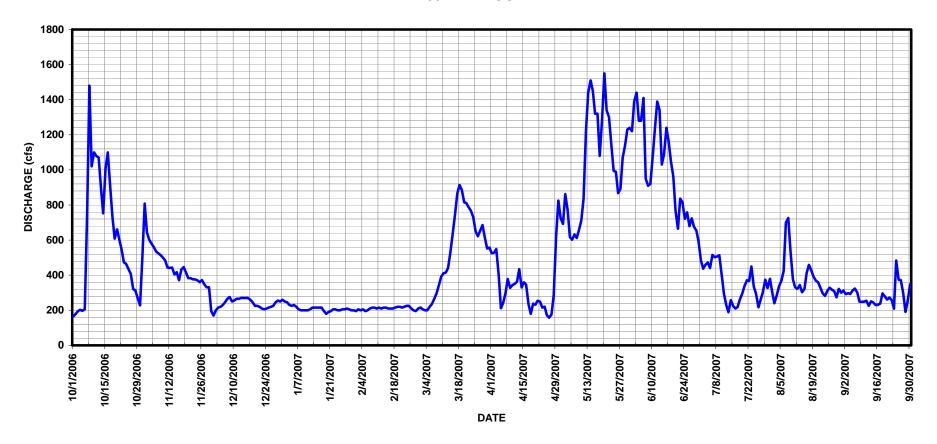
RATING TABLE. -- RIOMONCO19 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	165	808	170	250	195	215	524	726	1220	484	303	312	
2	180	645	200	245	205	205	528	692	1390	437	240	292	
3	195	603	215	230	200	200	549	862	1440	459	285	297	
4	202	579	220	225	205	200	401	771	1280	472	336	293	
5	197	560	230	230	195	220	212	617	1280	440	368	313	
6	205	534	245	220	200	235	242	602	1410	515	423	324	
7	757	524	265	205	210	265	296	632	950	502	699	302	
8	1480	514	275	200	215	295	378	612	909	506	726	249	
9	1020	500	250	200	215	340	327	662	920	513	535	248	
10	1100	483	255	200	210	390	343	712	1070	408	376	249	
11	1080	443	265	200	215	410	350	834	1240	294	331	254	
12	1070	441	265	205	210	415	362	1220	1390	231	322	225	
13	901	443	270	215	215	440	434	1440	1340	189	344	251	
14	752	404	270	215	215	525	330	1510	1030	258	303	244	
15	1010	417	270	215	210	635	359	1450	1090	225	321	230	
16	1100	371	270	215	210	740	346	1320	1240	210	413	231	
17	905	433	260	215	210	866	234	1320	1160	219	459	239	
18	732	446	245	195	215	914	180	1080	1050	262	427	296	
19	608	414	225	180	220	886	238	1290	962	295	392	279	
20	661	383	225	190	220	815	232	1550	766	338	368	261	
21	605	383	220	195	215	811	254	1340	665	371	359	272	
22	545	377	210	205	220	786	249	1300	836	367	329	258	
23	473	376	205	205	225	766	215	1150	815	450	295	209	
24	464	370	210	200	225	730	221	995	721	335	282	483	
25	434	360	215	200	210	649	172	989	758	294	311	375	
26	408	372	220	205	200	622	158	867	679	217	328	371	
27	321	347	225	205	195	655	175	892	724	261	317	296	
28	313	331	245	210	210	686	285	1070	676	305	308	191	
29	270	331	255	205		616	622	1140	655	374	274	254	
30	228	195	250	200		552	825	1230	593	326	322	348	
31	490		260	200		557		1240		379	300		
TOTAL	18871	13387	7405	6480	5890	16641	10041	32115	30259	10936	11396	8446	
MEAN	609	446	239	209	210	537	335	1036	1009	353	368	282	
AC-FT	37430	26550	14690	12850	11680	33010	19920	63700	60020	21690	22600	16750	
MAX	1480	808	275	250	225	914	825	1550	1440	515	726	483	
MIN	165	195	170	180	195	200	158	602	593	189	240	191	
CAL YR WTR YR	2006 2007	TOTAL TOTAL	125646 171867	MEAN MEAN	344 MAX 471 MAX	148 155	30 MIN 50 MIN	63 158	AC-FT AC-FT	249200 340900			

MAX DISCH: 2040 CFS AT 09:15 ON Oct. 8, 2006 GH 5.49 FT. GH CORR. 0.01 FT. SHIFT 0.03 FT. MAX GH: 5.50 FT. (GH CORR. 0.01 FT. APPLIED) AT 09:15 ON Oct. 8, 2006

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08221500 RIO GRANDE NEAR MONTE VISTA CO WY2007 HYDROGRAPH



#### RIO GRANDE AT RIO GRANDE-ALAMOSA COUNTY LINE, CO

LOCATION.--UTM coordinates: 406626 meters Easting, 4158964 meters Northing, Zone 13S, NAD83, in NW ½ NW ½ NW ½ section 1, T38N, R8E, NMPM, Rio Grande County, on left bank approximately 1 mile above bridge on county line road.

DRAINAGE AREA. -- 1,640 mi<sup>2</sup>.

GAGE.--Primary record generated from electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a 42-inch diameter corrugated metal well and shelter. A graphic water-stage recorder is operated as a data backup. Datum of gage is 7,595 feet, from topographic map.

REMARKS.--Record is complete and reliable, except for Nov. 30, 2006 through March 9, 2007, when the station was closed for the winter. The shaft encoder float was installed in an oil cylinder Mar. 9, 2007, and was the only record until Mar. 20, 2007, when the chart recorder was started. Stage-discharge relation was affected by ice March 10-15, 2007. A bank stabilization project, including the construction of a J-hook river structure, was undertaken from April 9-13, 2007. Record is good, except for periods of no gageheight and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE.--RIOLINCO08 USED FROM 01-OCT-2006 TO 09-APR-2007 RIOLINCO09 USED FROM 09-APR-2007 TO 30-SEP-2007

MEAN VALUES

NOV DEC JAN FEB MAR APR MAY JUN

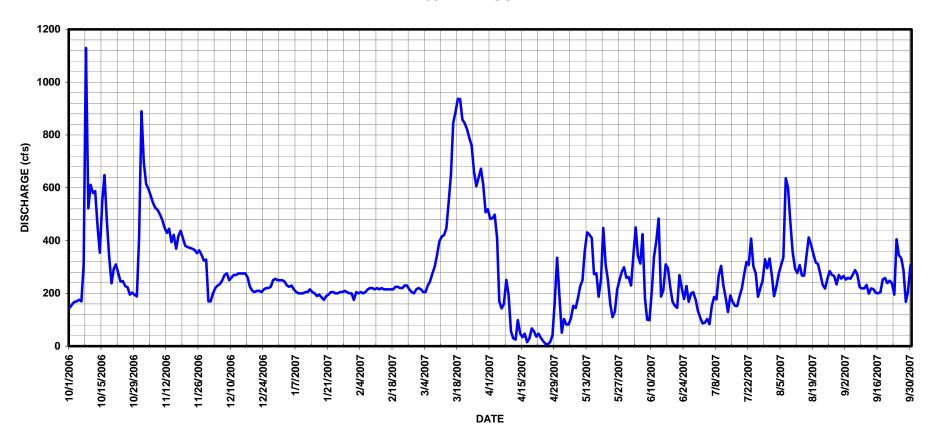
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	890	170	250	175	220	482	194	230	107	267	266
2	159	698	200	245	205	215	484	51	338	86	189	252
3	168	614	220	230	200	205	498	103	450	89	227	259
4	170	595	230	225	205	205	408	82	343	103	274	255
5	176	571	235	230	200	230	169	82	313	83	307	270
6	170	543	250	215	205	245	143	108	424	153	336	288
7	311	525	270	205	215	275	160	153	182	186	636	272
8	1130	516	275	200	220	300	251	144	100	177	602	223
9	522	500	250	200	220	345	196	180	98	267	467	219
10	611	479	260	200	215	395	57	228	211	304	357	219
11	580	450	270	205	220	415	30	249	339	231	294	232
12	587	429	270	205	215	420	25	358	400	182	277	199
13	453	445	275	215	220	445	99	431	483	129	307	219
14	354	394	275	205	215	540	48	423	188	192	267	216
15	547	422	275	200	215	650	34	410	211	169	267	202
16	648	369	275	190	215	845	47	273	310	153	342	200
17	472	417	260	195	215	889	15	276	296	152	412	205
18	341	437	225	185	215	937	29	187	222	190	383	253
19	238	407	210	175	225	936	67	255	168	218	350	258
20	293	380	205	190	225	858	56	447	153	270	317	239
21	310	375	210	195	220	845	36	307	145	319	311	248
22	276	372	210	205	220	822	47	251	269	308	272	238
23	245	369	205	205	230	790	31	158	218	407	233	195
24	246	365	215	200	230	759	19	110	179	303	218	405
25	227	352	220	200	215	663	7.7	131	228	275	253	344
26	223	363	220	205	205	606	7.0	213	168	187	284	334
27	195	346	225	205	200	637	16	248	200	220	270	289
28	203	325	250	210	215	672	41	281	204	249	266	168
29	195	328	255	205		613	166	299	176	329	234	209
30	188	170	250	200		507	335	259	134	295	270	306
31	416		250	200		519		262		332	256	
TOTAL	10800	13446	7410	6395	5975	17003	4003.7	7153	7380	6665	9745	7482
MEAN	348	448	239	206	213	548	133	231	246	215	314	249
AC-FT	21420	26670	14700	12680	11850	33730	7940	14190	14640	13220	19330	14840
MAX	1130	890	275	250	230	937	498	447	483	407	636	405
MIN	146	170	170	175	175	205	7.0	51	98	83	189	168
CAL YR	2006	TOTAL	82930	MEAN	227 MAX	11	30 MIN	45	AC-FT	164500		

CAL YR 2006 TOTAL 82930 MEAN 227 MAX 1130 MIN 45 AC-FT 164500 WTR YR 2007 TOTAL 103457.7 MEAN 283 MAX 1130 MIN 7 AC-FT 205200

MAX DISCH: 1590 CFS AT 10:00 ON Oct. 8, 2006 GH 5.88 FT. GH CORR. 0.10 FT. SHIFT 0.35 FT. MAX GH: 5.98 FT. (GH CORR. 0.10 FT. APPLIED) AT 10:00 ON Oct. 8, 2006

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## RIO GRANDE AT RIO GRANDE-ALAMOSA COUNTY LINE CO WY2007 HYDROGRAPH



#### 08223000 RIO GRANDE AT ALAMOSA, CO

LOCATION.--Lat 37°28'51", long 105°52'39", in SE4NE4 sec. 4, T. 37 N., R. 10 E., Alamosa County, on left bank 0.3 mile northwest of Adams State College and 9 miles upstream from Alamosa Creek.

DRAINAGE AREA. -- 1,710 mi<sup>2</sup>.

GAGE.--Graphic water-stage recorder, shaft encoder, and a Sutron satellite monitoring system with air temperature probe in a 4 ft. by 6 ft. exposed aggregate building with a 4 ft. diameter concrete well. Datum of gage is 7,532.66 ft.

REMARKS.--Record is complete and reliable, except for November 30, 2006 to Mar. 8, 2007, when the station was closed; and October 19, 20, 26, 27, 2006, when the lower inlets were left closed and the gage became temporarily isolated. The stage-discharge relation was affected by ice March 9-11, 2007. Record is good except, for periods of no gage-height and ice-affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

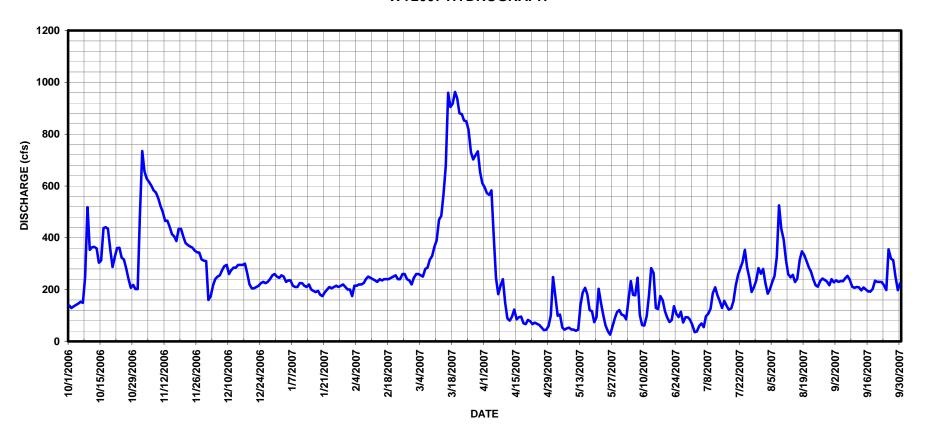
RATING TABLE. -- RIOALACO22D USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE,	IN CFS,		EAR OCTOBEI AN VALUES	R 2006 T	O SEPTEME	BER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	479	160	245	200	245	594	248	100	63	280	228
2	129	735	175	255	175	260	572	172	85	36	226	235
3	135	656	215	250	215	260	566	99	157	38	184	230
4	141	628	240	230	215	255	583	104	233	60	202	233
5	146	615	250	235	220	250	404	54	180	69	229	232
6	153	601	255	235	220	280	245	45	178	55	252	244
7	149	583	275	215	225	285	182	50	246	97	326	253
8	248	575	290	210	240	315	216	53	102	107	525	238
9	518	553	295	210	250	330	240	46	63	126	435	211
10	353	523	260	225	245	365	151	46	61	186	393	207
11	363	500	275	225	240	390	89	41	98	209	316	210
12	365	465	285	215	235	470	80	46	177	178	260	209
13	359	466	285	210	230	484	96	140	283	156	247	197
14	304	443	295	220	240	569	123	189	264	129	257	208
15	312	414	295	200	235	676	85	207	129	156	229	201
16	437	405	295	195	240	960	93	181	125	138	242	193
17	441	387	300	190	240	905	96	121	175	122	314	193
18	435	434	265	195	240	917	70	116	159	127	348	202
19	354	434	220	180	245	963	67	74	117	155	334	234
20	287	405	205	175	250	938	83	93	92	214	310	230
21	326	380	205	190	255	881	78	203	75	257	286	230
22	360	372	210	200	240	877	67	147	83	281	270	229
23	361	366	215	210	240	852	72	101	136	306	239	216
24	323	362	225	205	260	850	68	62	106	353	217	198
25	316	350	230	210	260	816	63	39	94	285	211	355
26	280	344	225	215	240	730	53	26	114	245	232	319
27	240	343	230	210	235	702	43	56	73	191	243	314
28	207	317	240	215	220	718	45	89	93	210	237	251
29	218	311	255	220		734	59	113	93	235	231	198
30	202	310	260	210		654	100	121	84	283	217	224
31	202		250	200		611		104		261	240	
TOTAL	8803	13756	7680	6600	6550	18542	5283	3186	3975	5328	8532	6922
MEAN	284	459	248	213	234	598	176	103	133	172	275	231
AC-FT	17460	27290		13090	12990	36780	10480	6320	7880	10570	16920	13730
MAX	518	735	300	255	260	963	594	248	283	353	525	355
MIN	129	310	160	175	175	245	43	26	61	36	184	193
CAL YR	2006	TOTAL	73861 MEAN	J :	202 MAX	735	MIN	53 A	C-FT	146500		
WTR YR		TOTAL	95157 MEAN		261 MAX	963		26 A		188700		
				-								

MAX DISCH: 1040 CFS AT 07:45 ON Mar. 16, 2007 GH 5.55 FT. SHIFT -0.13 FT. MAX GH: 5.55 FT. AT 07:45 ON Mar. 16, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08223000 RIO GRANDE AT ALAMOSA CO WY2007 HYDROGRAPH



#### CLOSED BASIN PROJECT CANAL NEAR ALAMOSA, CO

#### RIO GRANDE COMPACT STATION

LOCATION.--Lat 37°28'33", long 105°45'58", SW4SW4, sec. 3, T.37 N., R.11 E., Alamosa County, Hydrologic Unit 13010002, 400 ft north of State Highway 160, 5.5 mi east of Alamosa, Co. on right bank of Closed Basin Project Canal.

#### DRAINAGE AREA. --N/A

AC-FT

CAL YR 2006

WTR YR 2007

MAX

MIN

1470

30

19

1610

29

TOTAL

TOTAL

24

GAGE.--Graphic water-stage recorder, with shaft encoders in upstream and downstream wells (Ha and Hb), and Sutron satellite monitoring system in 8 ft. x 10 ft. steel plated building with concrete stilling wells at a 12 ft. concrete Parshall flume. The downstream (Hb) well is monitored to detect submergence. The Bureau of Reclamation owns and operates an independent Sutron system using pressure transducers, a water quality monitor, and temperature sensor.

REMARKS.--Record is complete and reliable. The stage-discharge relation was affected by ice Mar. 3, 2007; and by backwater (submerged) on Dec. 21, 2006, caused by a downstream ice jam. Record is good, except for periods of ice and backwater affected record, which are fair to poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

RATING TABLE. -- CBPALACO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	25	27	30	28	19	14	22	22	24	25	23
2	26	25	28	30	27	19	14	21	23	23	25	23
3	25	26	30	30	26	20	18	17	24	23	24	23
4	25	27	31	30	24	20	21	15	23	23	24	23
5	25	29	31	30	24	20	21	15	23	23	25	23
6	24	28	33	31	25	21	20	20	20	22	24	23
7	24	28	33	32	25	23	20	23	24	22	24	23
8	26	28	32	32	23	23	20	25	24	20	24	23
9	25	27	32	32	23	23	20	24	24	20	24	23
10	25	27	31	32	21	22	24	23	24	19	24	24
11	25	27	32	31	21	22	25	23	24	18	24	23
12	25	27	32	30	21	22	24	22	24	19	25	22
13	25	27	32	31	21	21	24	22	25	20	25	22
14	24	28	32	31	20	20	21	22	25	23	25	22
15	23	27	33	30	19	19	20	22	25	23	24	22
16	22	26	32	30	19	18	20	22	26	24	24	22
17	20	26	31	30	19	16	21	22	25	23	24	23
18	19	27	32	29	17	14	22	22	26	23	25	24
19	19	27	33	29	17	14	22	22	25	23	24	23
20	20	27	34	29	19	15	22	23	25	22	24	23
21	20	28	33	29	20	17	23	24	24	20	23	24
22	21	29	32	29	22	17	24	22	25	20	20	24
23	23	29	31	29	27	16	24	21	25	20	20	23
24	26	28	30	28	30	16	28	20	25	20	28	22
25	26	28	28	28	29	14	31	20	25	24	27	23
26	30	27	29	29	27	14	29	20	25	24	25	23
27	29	26	29	30	21	15	28	20	24	26	23	24
28	27	24	29	31	18	11	26	21	24	26	23	24
29	24	28	29	30		12	25	20	25	25	23	22
30	22	28	29	29		12	23	21	25	25	23	23
31	23		29	29		13		22		25	23	
TOTAL	740	814	959	930	633	548	674	658	728	692	745	689
MEAN	23.9	27.1	30.9	30.0	22.6	17.7	22.5	21.2	24.3	22.3	24.0	23.0

1090

23

11

1340

34 MIN

34 MIN

31

14

1310

25

15

6.4 AC-FT 11 AC-FT

1440

26

1370

26

16990

17470

18

1480

2.8

1370

2.4

22

MAX DISCH: 34 CFS AT 11:15 ON Dec. 20, 2006 GH 0.82 FT. SHIFT 0 FT. MAX GH: 1.92 FT. AT 07:30 ON Dec. 21, 2006

1840

32

28

1260

30

23.5 MAX 24.1 MAX

17

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

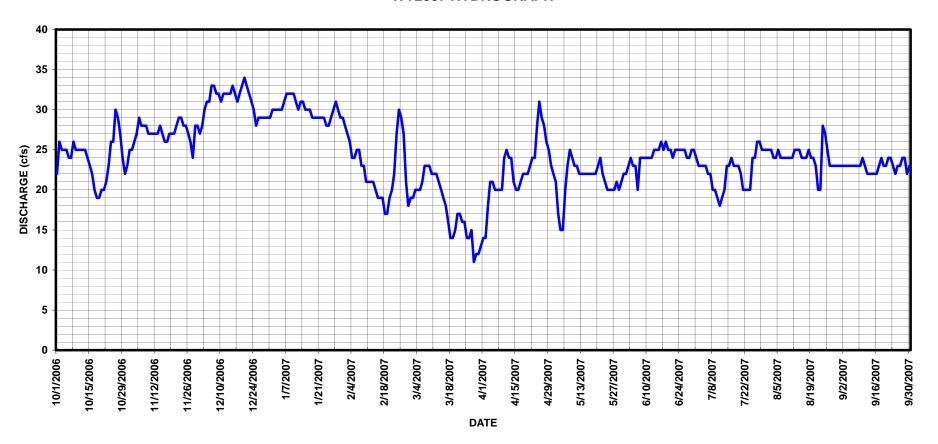
1900

34

27

8563.2 MEAN 8810 MEAN

## CLOSED BASIN PROJECT CANAL NEAR ALAMOSA CO WY2007 HYDROGRAPH



#### CLOSED BASIN IN SAN LUIS VALLEY

#### 08224500 KERBER CREEK NEAR VILLA GROVE, CO

LOCATION.--Lat 38°13′13″, long 106°05′20″, in SW4SE4, sec. 21, T. 46 N., R. 8 E., Saguache County, on left bank 7 miles west of Villa Grove.

DRAINAGE AREA AND PERIOD OF RECORD. -- 45.4 mi² (revised). (approx.) Originally established with staff gage only in 1911. Station at various locations from that time.

GAGE.--Graphic water-stage recorder, shaft encoder, and Sutron satellite monitoring system in a 6' by 6' exposed aggregate gage and 4' diameter concrete well at a concrete ramp flume. Full station name: Kerber Creek above Little Kerber Creek near Villa Grove, CO. Elevation of gage is 8,634 ft. from topographic map.

REMARKS.--Record is complete and reliable, except for January 13-31, February 1-6, 25-28 and March 1-20, 2007, when the float was affected by ice in the well. Stage-discharge relation was affected by ice November 12 through December 31, 2006, January 1-12, and February 7-24, 2007. The record is good, except for periods of no gage-height and ice affected record, which should be considered poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

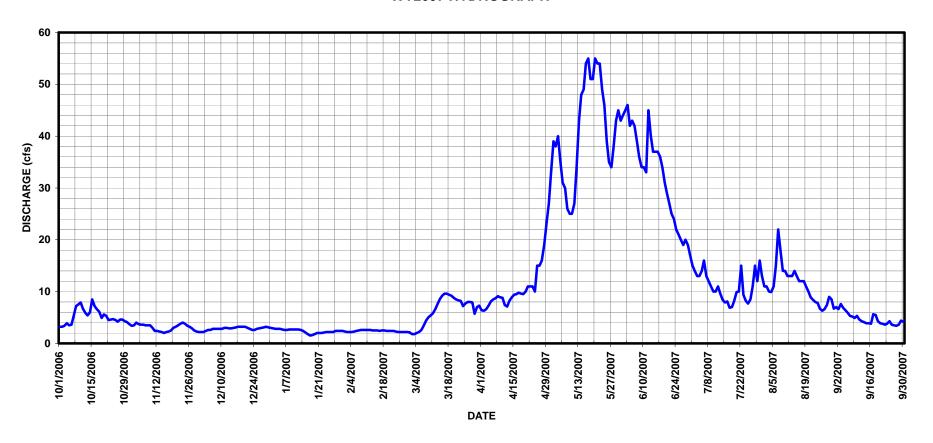
RATING TABLE. -- KERVILCO18 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	EAN VALUE	ES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.4	2.2	2.9	2.3	2.1	6.4	33	44	15	11	7.0
2	3.2	3.5	2.2		2.2	1.8	6.3	39	45	14	11	6.6
3	3.4	4.0	2.4	2.8	2.2	1.8	6.6	38	46	13	10	7.6
4	3.9	3.7	2.6	2.8	2.2	2.0	7.3	40	42	13	9.9	6.9
5	3.5	3.6	2.6	2.7	2.3	2.2	8.1	35	43	14	11	6.4
6	3.6	3.6	2.8	2.6	2.4	2.6	8.5	31	42	16	15	5.9
7	5.3	3.5	2.8	2.6	2.5	3.4	8.7	30	39	13	22	5.3
8	7.2	3.5	2.8	2.7	2.6	4.4	9.1	26	36	12	18	5.2
9	7.5	3.5	2.8	2.7	2.6	5.0	8.9	25	34	11	14	4.9
10	7.9	3.0	2.8	2.7	2.6	5.4	8.8	25	34	10	14	5.3
11	6.7	2.4	3.0	2.7	2.6	5.8	7.4	27	33	10	13	4.6
12	5.9	2.4	3.0	2.7	2.6	6.6	7.1	34	45	11	13	4.3
13	5.4	2.3	2.9	2.6	2.5	7.6	8.2	43	40	9.6	13	4.1
14	6.0	2.2	2.9	2.4	2.5	8.6	8.9	48	37	8.4	14	3.9
15	8.5	2.0	3.0	2.1	2.5	9.2	9.4	49	37	7.9	13	3.9
16	7.2	2.2	3.1		2.4	9.6	9.5	54	37	8.1	12	3.8
17	6.6	2.3	3.2	1.5	2.5	9.6	9.8	55	36	6.9	12	5.6
18	6.1	2.5	3.2		2.5	9.4	9.6	51	34	7.0	12	5.5
19	4.9	3.0	3.2		2.4	9.2	9.5	51	31	8.2	11	4.3
20	5.6	3.2	3.2		2.4	8.8	10	55	29	9.9	10	3.9
21	5.3	3.5	3.0	2.0	2.4	8.5	11	54	27	10	8.9	3.8
22	4.5	3.8	2.8	2.0	2.4	8.3	11	54	25	15	8.4	3.6
23	4.6	4.0	2.6	2.1	2.3	8.2	11	49	24	9.4	8.0	3.8
24	4.7	3.8	2.6	2.2	2.2	7.2	10	46	22	8.2	7.8	4.3
25	4.5	3.4	2.8	2.2	2.2	7.7	15	39	21	7.7	6.7	3.6
26	4.2	3.2	2.9	2.2	2.2	8.0	15	35	20	8.5	6.3	3.5
27	4.6	2.9	3.0	2.2	2.2	8.0	16	34	19	11	6.6	3.4
28	4.6	2.5	3.1		2.2	7.9	19	38	20	15	7.4	3.6
29	4.3	2.3	3.2	2.4		5.7	23	43	19	12	9.0	4.4
30	4.1	2.2	3.1			7.0	27	45	17	16	8.5	4.2
31	3.7		3.0	2.4		7.3		43		13	6.7	4.2
31	3.7		3.0	2.4		7.3		43		13	0.7	
TOTAL	160.7	91.4	88.8	73.0	66.9	198.9	326.1	1269	978	343.8	343.2	143.2
MEAN	5.18	3.05	2.86	2.35	2.39	6.42	10.9	40.9	32.6	11.1	11.1	4.77
AC-FT	319	181	176	145	133	395	647	2520	1940	682	681	284
MAX	8.5	4.0	3.2	2.9	2.6	9.6	27	55	46	16	22	7.6
MIN	3.2	2.0	2.2	1.5	2.2	1.8	6.3	25	17	6.9	6.3	3.4
CAL YR	2006	TOTAL	2555.2	MEAN	7.0 MAX		33 MIN	1.1	AC-FT	5070		
WTR YR		TOTAL	4083		11.2 MAX		55 MIN		AC-FT	8100		
******	2007	10171	1003	11111114	TT.Z LIMM	`	J	1.5	110 11	0100		

MAX DISCH: 60 CFS AT 23:00 ON May. 16, 2007 GH 1.29 FT. SHIFT 0.10 FT. MAX GH: 1.29 FT. AT 23:00 ON May. 16, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08224500 KERBER CREEK NEAR VILLA GROVE CO WY2007 HYDROGRAPH



# CLOSED BASIN IN SAN LUIS VALLEY

# GARNER CREEK NEAR VILLA GROVE, CO

LOCATION.--Lat 38°10'27", long 105°48'29", in SE 14 SEC. 1, T.45 N., R.10 E., NMPM, Saguache Co., on right bank, 12 miles SE of Villa Grove.

DRAINAGE AREA.--6.4 mi<sup>2</sup>.

GAGE. -- Primary record is generated by an electronic data logger with satellite transmitter, which records gageheight data from a float-operated shaft encoder in a 2-foot steel culvert pipe stilling well with a small steel box-type shelter atop well. A 1-inch intake pipe attaches well to 2-foot Parshall flume. Flume and staff gage have been at this site many years. Elevation 8680 ft.

REMARKS.--Record is complete and reliable, except for October 26, 2006, when the station failed to transmit values for four hours; Nov. 28, 2006 through Dec. 5, 2006, when the well was frozen; Dec. 6, 2006 through Mar. 27, 2007, when the station was closed for the winter; and May 8-14, 18-23, 25-31, June 1-5, 7, 8, 16-27, 2007, when the inlet was plugged. Stage-discharge relation was affected by ice Nov. 15, 2006, March 29, 30, April 11, 14, 2007. Record is good, except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

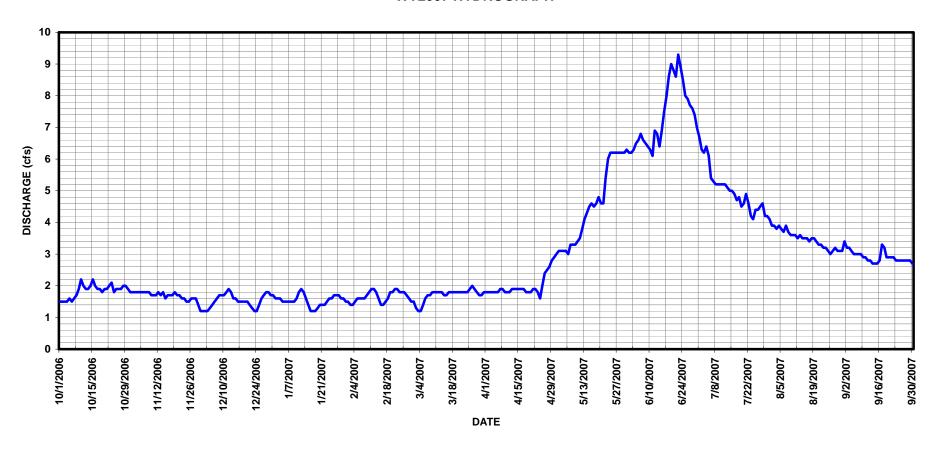
RATING TABLE. -- GARVILCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	AN VALUES	3					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.8	1.2	1.6	1.5	1.5	1.8	3.0	6.2	6.7	3.9	3.4
2	1.5	1.8	1.2	1.6	1.4	1.3	1.8	3.1	6.2	6.3	3.9	3.2
3	1.5	1.8	1.2	1.6	1.4	1.2	1.8	3.1	6.3	6.2	3.8	3.2
4	1.5	1.8	1.3	1.5	1.5	1.2	1.8	3.1	6.5	6.4	3.9	3.1
5	1.6	1.8	1.4	1.5	1.6	1.4	1.8	3.1	6.6	6.1	3.8	3.0
6	1.5	1.8	1.5	1.5	1.6	1.6	1.8	3.0	6.8	5.4	3.7	3.0
7	1.6	1.8	1.6	1.5	1.6	1.7	1.9	3.3	6.6	5.3	3.9	3.0
8	1.7	1.8	1.7	1.5	1.6	1.7	1.9	3.3	6.5	5.2	3.7	3.0
9	1.9	1.7	1.7	1.5	1.7	1.8	1.8	3.3	6.4	5.2	3.6	2.9
10	2.2	1.7	1.7	1.6	1.8	1.8	1.8	3.4	6.3	5.2	3.6	2.9
11	2.0	1.7	1.8	1.8	1.9	1.8	1.8	3.5	6.1	5.2	3.6	2.8
12	1.9	1.8	1.9	1.9	1.9	1.8	1.9	3.8	6.9	5.2	3.5	2.8
13	1.9	1.7	1.8	1.8	1.8	1.8	1.9	4.1	6.8	5.1	3.6	2.7
14	2.0	1.8	1.6	1.6	1.6	1.7	1.9	4.3	6.4	5.0	3.5	2.7
15	2.2	1.6	1.6	1.4	1.4	1.7	1.9	4.5	6.9	5.0	3.5	2.7
16	2.0	1.7	1.5	1.2	1.4	1.8	1.9	4.6	7.5	4.9	3.5	2.8
17	1.9	1.7	1.5	1.2	1.5	1.8	1.9	4.5	8.0	4.7	3.4	3.3
18	1.9	1.7	1.5	1.2	1.6	1.8	1.8	4.6	8.6	4.8	3.5	3.2
19	1.8	1.8	1.5	1.3	1.8	1.8	1.8	4.8	9.0	4.5	3.5	2.9
20	1.9	1.7	1.5	1.4	1.8	1.8	1.8	4.6	8.8	4.6	3.4	2.9
21	1.9	1.7	1.4	1.4	1.9	1.8	1.9	4.6	8.6	4.9	3.3	2.9
22	2.0	1.6	1.3	1.4	1.9	1.8	1.9	5.4	9.3	4.6	3.3	2.9
23	2.1	1.6	1.2	1.5	1.8	1.8	1.8	6.0	8.9	4.2	3.2	2.8
24	1.8	1.5	1.2	1.6	1.8	1.8	1.6	6.2	8.5	4.1	3.2	2.8
25	1.9	1.5	1.4	1.6	1.8	1.9	2.0	6.2	8.0	4.4	3.1	2.8
26	1.9	1.6	1.6	1.7	1.7	2.0	2.4	6.2	7.9	4.4	3.0	2.8
27	1.9	1.6	1.7	1.7	1.6	1.9	2.5	6.2	7.7	4.5	3.1	2.8
28	2.0	1.6	1.8	1.7	1.5	1.8	2.6	6.2	7.6	4.6	3.2	2.8
29	2.0	1.4	1.8	1.6		1.7	2.8	6.2	7.4	4.2	3.1	2.8
30	1.9	1.2	1.7	1.6		1.7	2.9	6.2	7.0	4.2	3.1	2.7
31	1.8		1.7	1.5		1.8		6.3		4.1	3.1	
TOTAL	57.2	50.3	47.5	47.5	46.4	53.0	59.2	140.7	220.3	155.2	107.5	87.6
MEAN	1.85	1.68	1.53	1.53	1.66	1.71	1.97	4.54	7.34	5.01	3.47	2.92
AC-FT	113	100	94	94	92	105	117	279	437	308	213	174
MAX	2.2	1.8	1.9	1.9	1.9	2.0	2.9	6.3	9.3	6.7	3.9	3.4
MIN	1.5	1.2	1.2	1.2	1.4	1.2	1.6	3.0	6.1	4.1	3.0	2.7
CAL YR	2006	TOTAL	596.2	MEAN	1.63 MAX	2.2	2 MIN	1.2	AC-FT	1180		
WTR YR		TOTAL	1072.4		2.94 MAX		3 MIN		AC-FT	2130		
110	200,	101111	10/2.1	11.4	2.91 IIM	٥.٠	, 11114	٠. ٧		2100		

MAX DISCH: 9.40 CFS AT 11:45 ON Jun. 22, 2007 GH 1.02 FT. GH CORR. 0.02 FT. SHIFT 0.07 FT. (Estimated) MAX GH: 1.04 FT. (GH CORR. 0.02 FT. APPLIED) AT 11:45 ON Jun. 22, 2007 (Estimated)

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# GARNER CREEK NEAR VILLA GROVE CO WY2007 HYDROGRAPH



# CLOSED BASIN IN SAN LUIS VALLEY

# MAJOR CREEK NEAR VILLA GROVE, CO

**LOCATION.--**Lat  $38^{\circ}09'26''$ , long  $105^{\circ}48'32''$ , in NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  Sec. 13, T.45 N., R.10 E., NMPM, Saguache Co., on right bank, 11 miles SE of Villa Grove.

DRAINAGE AREA.--5.0 mi<sup>2</sup>.

GAGE.--Primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a 2 foot steel culvert pipe stilling well with a small steel box-type shelter atop well at a 2-foot Parshall flume. Elevation of gage is 8410 ft.

REMARKS.--Record is complete and reliable, except for Nov. 30, Dec. 1 - 5, 2006, when the well was frozen,; Dec.6, 2006 - Mar.27, 2007, when the station was closed for the winter; and May 8, June 30, Aug. 16, 2007, when there was missing satellite data. Stage-discharge relation was affected by ice Nov. 15, 28, 29, 2006 and April 11-13, 2007. Record good, except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

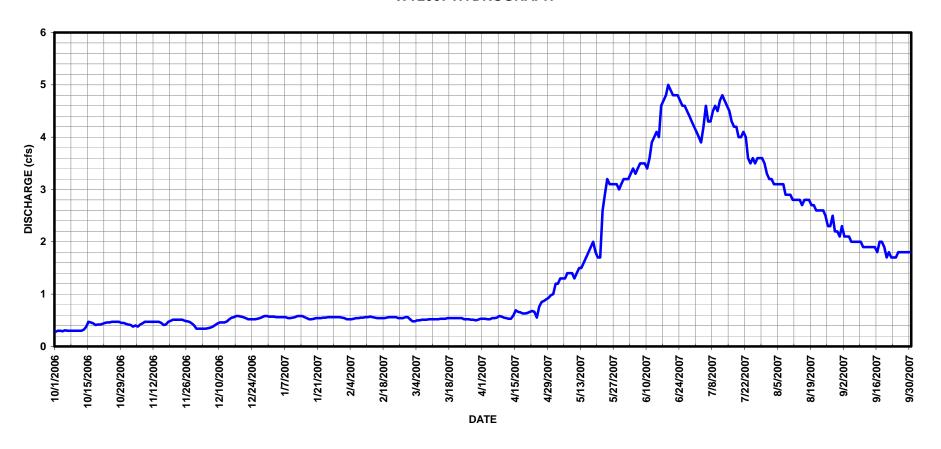
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE.--MAJVILCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	.28	.42	.34	.57	.54	.52	.53	1.0	3.2	4.1	3.2	2.3		
2	.30	.41	.34	.57	.52	.48	.53	1.2	3.2	4.0	3.2	2.1		
3	.30	.38	.34		.52	.48	.52	1.2	3.3	3.9	3.1	2.1		
4	.29	.40	.34	.56	.52	.50	.52	1.3	3.4	4.2	3.1	2.1		
5	.31	.38	.35		.53	.50	.54	1.3	3.3	4.6	3.1	2.0		
6	.30	.42	.36		.54	.51	.54	1.3	3.4	4.3	3.1	2.0		
7	.30	.44	.38		.54	.51	.55	1.4	3.5	4.3	3.1	2.0		
8	.30	.47	.41		.55	.51	.58	1.4	3.5	4.5	2.9	2.0		
9	.30	.47	.44		.55	.52	.57	1.4	3.5	4.6	2.9	2.0		
10	.30	.47	.46	.55	.56	.52	.55	1.3	3.4	4.5	2.9	1.9		
11	.30	.47	.46	.56	.56	.52	.54	1.4	3.6	4.7	2.8	1.9		
12	.30	.47	.46	.58	.57	.52	.53	1.5	3.9	4.8	2.8	1.9		
13	.32	.47	.48		.56	.52	.53	1.5	4.0	4.7	2.8	1.9		
14	.37	.47	.52	.58	.55	.53	.59	1.6	4.1	4.6	2.8	1.9		
15	.47	.45	.55		.54	.53	.69	1.7	4.0	4.5	2.7	1.9		
16	.46	.41	.56	.54	.54	.53	.66	1.8	4.6	4.3	2.8	1.8		
17	.44	.42	.58	.52	.54	.54	.65	1.9	4.7	4.2	2.8	2.0		
18	.41	.47	.58	.52	.54	.54	.63	2.0	4.8	4.2	2.8	2.0		
19	.42	.49	.57	.53	.55	.54	.63	1.8	5.0	4.0	2.7	1.9		
20	.42	.51	.56	.54	.56	.54	.64	1.7	4.9	4.0	2.7	1.7		
21	.43	.51	.54	.54	.56	.54	.66	1.7	4.8	4.1	2.6	1.8		
22	.45	.51	.52	.54	.56	.54	.68	2.6	4.8	4.0	2.6	1.7		
23	.46	.51	.52	.55	.56	.54	.66	2.9	4.8	3.6	2.6	1.7		
24	.46	.51	.52	.55	.54	.52	.55	3.2	4.7	3.5	2.6	1.7		
25	.47	.49	.52	.56	.54	.52	.76	3.1	4.6	3.6	2.5	1.8		
26	.47	.48	.53	.56	.54	.52	.85	3.1	4.6	3.5	2.3	1.8		
27	.47	.47	.54	.56	.56	.51	.87	3.1	4.5	3.6	2.3	1.8		
28	.47	.44	.56	.56	.56	.51	.90	3.1	4.4	3.6	2.5	1.8		
29	.45	.40	.58			.50	.93	3.0	4.3	3.6	2.2	1.8		
30	.45	.34	.58	.56		.51	.98	3.1	4.2	3.5	2.2	1.8		
31	.43		.57	.55		.53		3.2		3.3	2.1			
TOTAL	11.90	13.55	15.06		15.30	16.10	19.36	61.8	123.0	126.9	84.8	57.1		
MEAN	.38	.45	.49	.55	.55	.52	.65	1.99	4.10	4.09	2.74	1.90		
AC-FT	24	27	30		30	32	38	123	244	252	168	113		
MAX	.47	.51	.58	.58	.57	.54	.98	3.2	5.0	4.8	3.2	2.3		
MIN	.28	.34	.34	.52	.52	.48	.52	1.0	3.2	3.3	2.1	1.7		
CAL YR	2006	TOTAL	169.40	MEAN	0.46 MAX	0.7			AC-FT	336				
WTR YR	2007	TOTAL	562.04	MEAN	1.54 MAX		5 MIN	.28	AC-FT	1110				

MAX DISCH: 8.64 CFS AT 15:15 ON Aug. 28, 2007 GH 1.04 FT. GH CORR. -.01 FT. SHIFT 0.02 FT. MAX GH: 1.03 FT. (GH CORR. -.01 FT. APPLIED) AT 15:15 ON Aug. 28, 2007

# MAJOR CREEK NEAR VILLA GROVE CO WY2007 HYDROGRAPH



# CLOSED BASIN IN SAN LUIS VALLEY

# COTTON CREEK NEAR MINERAL HOT SPRINGS, CO

**LOCATION.--**Lat  $38^{\circ}07'55''$ , long  $105^{\circ}47'15''$ , in SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  Sec. 15, T.45 N., R.11 E., NMPM, Saguache Co., on left bank, 9 miles SE of Mineral Hot Springs.

DRAINAGE AREA.--12.8 mi<sup>2</sup>.

GAGE.--Graphic water stage recorder, shaft encoder, and Sutron data collection platform with satellite telemetry in 4-foot diameter culvert pipe well and shelter. Primary reference gage is drop tape with weight from a reference point set in the shelf. Elevation of gage is 8600 ft.

REMARKS.--Record is complete and reliable, except for Nov. 15, 2006 through Mar. 27, 2007, when the station was closed for the winter; and Jun. 13-19, 27, Jul. 4-6, 2007, when the inlets were plugged. Record is good, except for periods of no gage-height, which are poor. The peak gage-height and maximum discharge were based on the last assumed correct gage-height prior to the inlets plugging and should also be considered poor. Station maintained and record developed by Div. III Hydrographic Staff.

RATING TABLE.--COCRMICO02 USED FROM 01-OCT-2006 TO 15-NOV-2006 COCRMICO03 USED FROM 15-NOV-2006 TO 30-SEP-2007

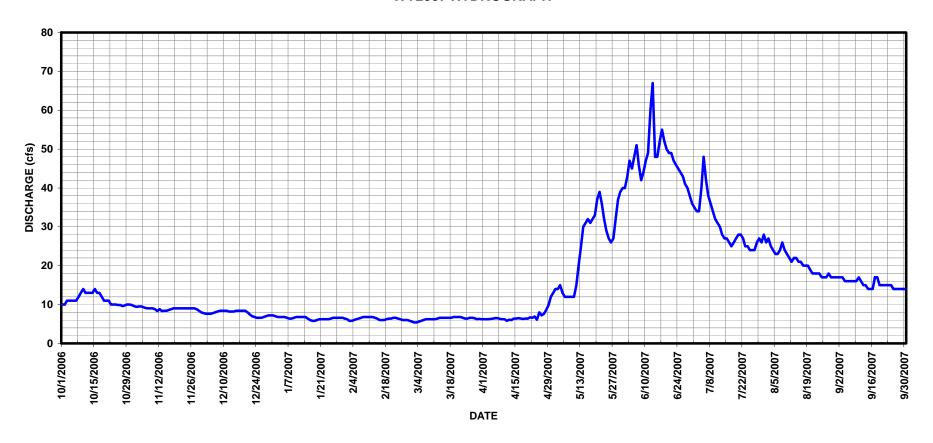
# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

	OCT	NOV										
DAY	001	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	9.6	7.8	7.0	6.2	5.6	6.2	13	40	35	26	17
2	10	9.4	7.6	6.8	5.8	5.4	6.2	14	43	34	27	17
3	11	9.5	7.6	6.8	5.8	5.4	6.2	14	47	34	25	17
4	11	9.5	7.6	6.8	6.0	5.6	6.3	15	45	40	24	16
5	11	9.3	7.8	6.8	6.2	5.8	6.4	13	48	48	23	16
6	11	9.1	8.0	6.6	6.4	6.0	6.5	12	51	42	23	16
7	11	9.0	8.2	6.4	6.6	6.2	6.5	12	46	38	24	16
8	12	9.0	8.4	6.4	6.8	6.2	6.3	12	42	36	26	16
9	13	9.0	8.4	6.6	6.8	6.2	6.2	12	44	34	24	16
10	14	8.8	8.4	6.8	6.8	6.2	6.2	12	47	32	23	17
11	13	8.3	8.4	6.8	6.8	6.2	5.8	15	49	31	22	16
12	13	8.8	8.2	6.8	6.8	6.4	6.1	20	60	30	21	15
13	13	8.3	8.2	6.8	6.6	6.6	6.0	25	67	28	22	15
14	13	8.4	8.2	6.8	6.4	6.6	6.4	30	48	27	22	14
15	14	8.4	8.4	6.4	6.0	6.6	6.4	31	48	27	21	14
16	13	8.6	8.4	6.0	6.0	6.6	6.5	32	52	26	21	14
17	13	8.8	8.4	5.8	6.0	6.6	6.4	31	55	25	20	17
18	12	9.0	8.4	5.8	6.2	6.6	6.3	32	52	26	20	17
19	11	9.0	8.4	6.0	6.4	6.8	6.4	33	50	27	20	15
20	11	9.0	8.0	6.2	6.4	6.8	6.4	37	49	28	19	15
21	11	9.0	7.4	6.2	6.6	6.8	6.7	39	49	28	18	15
22	10	9.0	7.0		6.6	6.8	6.6	36	47	27	18	15
23	10	9.0	6.8	6.2	6.4	6.6	6.9	32	46	25	18	15
24	10	9.0	6.6	6.2	6.2	6.4	6.1	29	45	25	18	15
25	9.9	9.0	6.6	6.4	6.0	6.4	8.0	27	44	24	17	14
26	9.9	9.0	6.6	6.6	6.0	6.6	7.2	26	43	24	17	14
27	9.6	9.0	6.8	6.6	6.0	6.6	7.6	27	41	24	17	14
28	9.8	8.8	7.0		5.8	6.5	8.6	32	40	26	18	14
29	10	8.4	7.2			6.2	9.9	37	38	27	17	14
30	10	8.0	7.2			6.3	12	39	36	26	17	14
31	9.9		7.2	6.4		6.2		40		28	17	
TOTAL	350.1	267.0	239.2	201.0	176.6	195.8	205.3	779	1412	932	645	460
MEAN	11.3	8.90	7.72		6.31	6.32	6.84	25.1	47.1	30.1	20.8	15.3
AC-FT	694	530	474	399	350	388	407	1550	2800	1850	1280	912
MAX	14	9.6	8.4	7.0	6.8	6.8	12	40	67	48	27	17
MIN	9.6	8.0	6.6	5.8	5.8	5.4	5.8	12	36	24	17	14
CAL YF	2006	TOTAL	3497.7	MEAN	9.58 MAX	:	22 MIN	5.1	AC-FT	6940		

CAL YR 2006 TOTAL 3497.7 MEAN 9.58 MAX 22 MIN 5.1 AC-FT 6940 WTR YR 2007 TOTAL 5863 MEAN 16.1 MAX 67 MIN 5.4 AC-FT 11630

MAX DISCH: 82.1 CFS AT 22:00 ON Jul. 4, 2007 GH 3.92 FT. SHIFT 0 FT. MAX GH: 3.92 FT. AT 22:00 ON Jul. 4, 2007

# COTTON CREEK NEAR MINERAL HOT SPRINGS CO WY2007 HYDROGRAPH



# CLOSED BASIN IN SAN LUIS VALLEY

# WILD CHERRY CREEK NEAR CRESTONE, CO

LOCATION.--Lat 38°06'01", long 105°46'04", SW 4 Sec. 33, T.45 N., R.11 E., NMPM, Saguache Co., on right bank, 12 miles SE of Mineral Hot Springs, 8 Miles NW of Crestone.

DRAINAGE AREA.--4.5 mi<sup>2</sup>.

GAGE. -- Primary record is generated by an electronic data logger with satellite transmitter, which records gageheight data from a float-operated shaft encoder in a 4-foot diameter culvert pipe well and shelter. A graphic water-stage recorder is operated as a data backup. Elevation of gage is 8560 ft.

**REMARKS.--**Record complete and reliable, except for Oct. 15-19, 2006, April 28-30, May 13-17, 19-22, 2007, when the inlets were plugged and the well was isolated from the stream; Nov. 14-18, 29, 30, Dec. 1-5, 2006, Mar. 29-31, April 11, 25, 2007, when the well was frozen; and Dec. 6, 2006 through Mar. 27, 2007, when station was closed for the winter. Stage-discharge relationship was affected by ice April 14, 24, 2007. Record is fair, except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

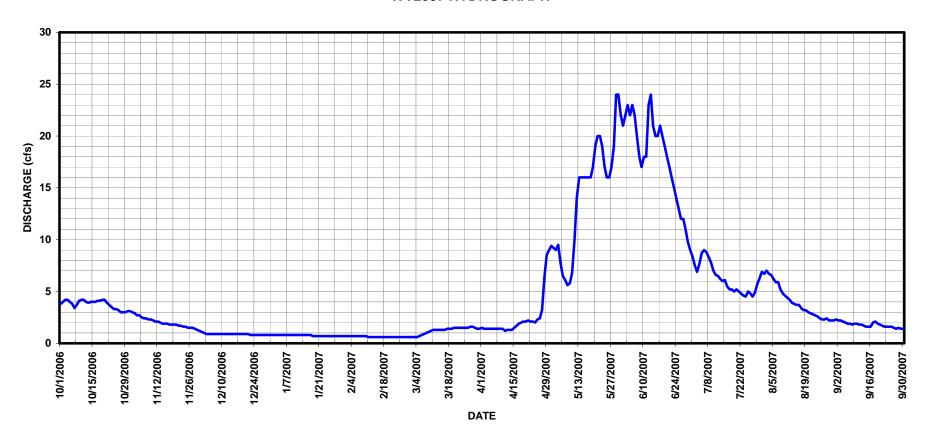
RATING TABLE. -- CHECRECO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

			210011		ME	CAN VALUES	211 2000	10 02111				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	3.0	1.1	.80	.70	.60	1.5	9.4	21	8.4	6.7	2.3
2	4.0	2.9	1.0	.80	.70	.60	1.4	9.2	22	7.5	7.0	2.2
3	4.2	2.7	.90	.80	.70	.60	1.4	9.0	23	6.9	6.7	2.2
4	4.2	2.7	.90	.80	.70	.60	1.4	9.5	22	7.7	6.6	2.1
5	4.0	2.5	.90	.80	.70	.70	1.4	7.7	23	8.7	6.2	2.0
6	3.8	2.4	.90		.70	.80	1.4	6.5	22	9.0	5.9	1.9
7	3.4	2.4	.90		.70	.90	1.4	6.1	20	8.8	5.9	1.9
8	3.7	2.3	.90		.70	1.0	1.4	5.6	18	8.3	5.2	1.8
9	4.1	2.3	.90		.70	1.1	1.4	5.8	17	7.8	4.8	1.9
10	4.2	2.2	.90		.70	1.2	1.4	6.8	18	7.0	4.6	1.9
11	4.2	2.1	.90		.60	1.3	1.2	10	18	6.6	4.4	1.8
12	4.0	2.1	.90		.60	1.3	1.3	14	23	6.5	4.2	1.8
13	3.9	2.0	.90		.60	1.3	1.3	16	24	6.2	3.9	1.7
14	4.0	1.9	.90		.60	1.3	1.3	16	21	6.0	3.8	1.6
15	4.0	1.9	.90		.60	1.3	1.5	16	20	6.1	3.7	1.6
16	4.0	1.9	.90		.60	1.3	1.7	16	20	5.5	3.7	1.6
17	4.1	1.8	.90		.60	1.4	1.9	16	21	5.2	3.4	2.0
18	4.1	1.8	.90		.60	1.4	2.0	16	20	5.2	3.2	2.1
19	4.2	1.8	.90		.60	1.4	2.1	17	19	5.0	3.2	1.9
20	4.2	1.8	.90		.60	1.5	2.1	19	18	5.2	3.0	1.8
21	3.9	1.7	.90		.60	1.5	2.2	20	17	5.0	2.9	1.7
22	3.7	1.7	.80		.60	1.5	2.1	20	16	4.8	2.8	1.6
23	3.5	1.6	.80		.60	1.5	2.1	19	15	4.6	2.7	1.6
24	3.3	1.6	.80		.60	1.5	2.0	17	14	4.5	2.6	1.6
25	3.3	1.5	.80		.60	1.5	2.3	16	13	5.0	2.4	1.6
26	3.2	1.5	.80		.60	1.5	2.4	16	12	4.8	2.3	1.5
27	3.0	1.5	.80		.60	1.6	3.2	17	12	4.5	2.3	1.4
28	3.0	1.4	.80		.60	1.6	6.4	19	11	4.9	2.4	1.5
29	3.0	1.3	.80			1.5	8.5	24	9.8	5.7	2.2	1.4
30	3.1	1.2	.80			1.4	9.0	24	9.0	6.3	2.2	1.4
31	3.1		.80	.70		1.4		22		6.9	2.2	
TOTAL	116.2	59.5	27.20	23.40	17.80	38.10	70.7	445.6	538.8	194.6	123.1	53.4
MEAN	3.75	1.98	.88	.75	.64	1.23	2.36	14.4	18.0	6.28	3.97	1.78
AC-FT	230	118	54	46	35	76	140	884	1070	386	244	106
MAX	4.2	3.0	1.1	.80	.70	1.6	9.0	24	24	9.0	7.0	2.3
MIN	3.0	1.2	.80	.70	.60	.60	1.2	5.6	9.0	4.5	2.2	1.4
CAL YR	2006	TOTAL	622.64	MEAN	1.71 MAX	6.7	MIN	.3	AC-FT	1240		
WTR YR	2007	TOTAL	1708.4	MEAN	4.68 MAX	24	MIN	.6	AC-FT	3390		

MAX DISCH: 30.1 CFS AT 23:30 ON Jun. 12, 2007 GH 2.66 FT. SHIFT -0.09 FT. MAX GH: 2.66 FT. AT 23:30 ON Jun. 12, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# WILD CHERRY CREEK NEAR CRESTONE CO WY2007 HYDROGRAPH



# CLOSED BASIN IN SAN LUIS VALLEY

# RITO ALTO CREEK NEAR CRESTONE, CO

LOCATION.--Lat 38°04'39", long 105°45'43", in SW1/4NE1/4 Sec. 9, T.44 N., R.11 E., NMPM, Saguache Co., on right bank 12 miles SE of Mineral Hot Springs, 7 miles NW of Crestone.

DRAINAGE AREA.--10.3 mi<sup>2</sup>.

GAGE.--The primary record is generated by an electronic data logger with satellite transmitter, which records
 gage-height data from a float-operated shaft encoder in a 4-foot diameter culvert pipe shelter and well.
 A graphic water-stage recorder is operated as a data backup. Elevation of gage is 8380 ft.

REMARKS.--Record is complete and reliable, except for Nov. 29 to Dec. 5, 2006, when the well was frozen; and Dec. 6, 2006 to Mar. 27, 2007, when station was closed for the winter. Stage-discharge relation was affected by ice Nov.12-15, 2006, and Mar.29-31, April 11-14, 2007. Record is good, except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

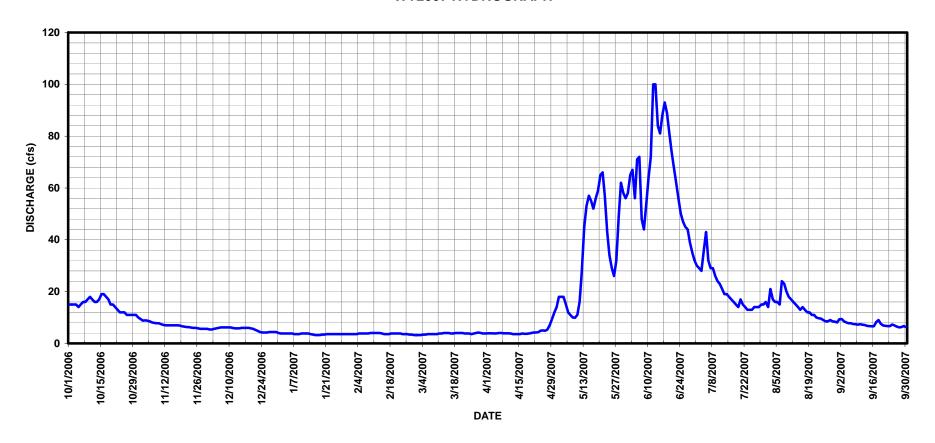
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- RITCRECO04 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES  DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	15	9.4	5.4	3.8	3.6	3.2	3.9	14	58	30	14	9.3		
2	15	8.8	5.4	3.8	3.6	3.2	3.9	18	65	29	21	9.4		
3	15	8.9	5.6	3.8	3.6	3.2	3.9	18	67	28	17	8.5		
4	15	8.8	5.8	3.8	3.8	3.4	3.8	18	56	36	16	8.1		
5	14	8.5	6.0	3.8	3.8	3.4	3.9	15	71	43	16	7.8		
6	15	8.1	6.2	3.8	3.8	3.6	4.0	12	72	32	15	7.8		
7	16	7.9	6.2	3.6	3.8	3.6	4.0	11	48	29	24	7.5		
8	16	7.8	6.2	3.6	3.8	3.6	3.9	10	44	29	23	7.4		
9	17	7.8	6.2	3.6	4.0	3.6	3.9	9.9	54	26	20	7.2		
10	18	7.4	6.2		4.0	3.6	3.9	11	64	24	18	7.4		
11	17	7.1	6.0	3.8	4.0	3.8	3.8	16	72	23	17	7.2		
12	16	7.0	5.8	3.8	4.0	3.8	3.6	28	100	21	16	7.1		
13	16	7.0	5.8	3.8	4.0	4.0	3.6	45	100	19	15	6.8		
14	17	7.0	5.8	3.6	3.8	4.0	3.6	53	84	19	14	6.7		
15	19	7.0	6.0	3.4	3.6	4.0	3.6	57	81	18	13	6.6		
16	19	7.0	6.0	3.2	3.6	3.8	3.8	55	88	17	14	6.6		
17	18	7.0	6.0	3.2	3.6	3.8	3.7	52	93	16	13	8.2		
18	17	6.9	6.0	3.2	3.8	4.0	3.7	56	89	15	12	9.0		
19	15	6.6	5.8	3.4	3.8	4.0	3.8	59	81	14	12	7.6		
20	15	6.5	5.6	3.4	3.8	4.0	4.0	65	74	17	11	6.9		
21	14	6.3	5.2	3.6	3.8	4.0	4.2	66	68	15	11	6.8		
22	13	6.3	4.8	3.6	3.8	3.8	4.2	57	62	14	10	6.7		
23	12	6.1	4.4	3.6	3.6	3.8	4.3	43	56	13	9.7	6.7		
24	12	6.0	4.2	3.6	3.6	3.8	4.9	34	50	13	9.6	7.3		
25	12	6.0	4.2	3.6	3.6	3.6	5.0	29	47	13	9.0	6.9		
26	11	5.8	4.2	3.6	3.4	3.8	4.9	26	45	14	8.5	6.5		
27	11	5.6	4.4	3.6	3.4	4.0	5.3	32	44	14	8.5	6.2		
28	11	5.6	4.4	3.6	3.2	4.2	7.1	49	39	14	9.0	6.3		
29	11	5.6	4.4	3.6		4.0	9.4	62	35	15	8.5	6.7		
30	11	5.6	4.4	3.6		3.8	12	58	32	15	8.4	6.3		
31	10		4.0	3.6		3.8		56		16	8.1			
TOTAL	453	211.4	166.6	111.8	104.2	116.2	137.6	1134.9	1939	641	421.3	219.5		
MEAN	14.6	7.05	5.37	3.61	3.72	3.75	4.59	36.6	64.6	20.7	13.6	7.32		
AC-FT	899	419	330	222	207	230	273	2250	3850	1270	836	435		
MAX	19	9.4	6.2	3.8	4.0	4.2	12	66	100	43	24	9.4		
MIN	10	5.6	4.0	3.2	3.2	3.2	3.6	9.9	32	13	8.1	6.2		
CAL YR	2006	TOTAL	3307.8	MEAN	9.06 MAX	4	1 MIN	2.1	AC-FT	6560				
WTR YR	2007	TOTAL	5656.5	MEAN	15.5 MAX	10	0 MIN	3.2	AC-FT	11220				

MAX DISCH: 114 CFS AT 02:15 ON Jun. 13, 2007 GH 2.92 FT. SHIFT 0.06 FT. MAX GH: 2.92 FT. AT 02:15 ON Jun. 13, 2007

# RITO ALTO CREEK NEAR CRESTONE CO WY2007 HYDROGRAPH



# CLOSED BASIN IN SAN LUIS VALLEY

# SAN ISABEL CREEK NEAR CRESTONE, CO

LOCATION.--Lat 38°02'03", long 105°43'03", in SW1/4,NW1/4, sec. 25, T.44 N., R.11 E., NMPM, Saguache Co., on left bank 3 miles NW of Crestone.

DRAINAGE AREA.--5.7 mi<sup>2</sup>.

GAGE. -- The primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a 4-foot diameter culvert shelter and well. A graphic water-stage recorder is operated as a data backup. Elevation of gage is 8200 ft.

REMARKS.--Record is complete and reliable, except for November 13, 2006 through March 26, 2007, when station was closed for winter, and March 29, April 11 and 14, 2007, when the stage-discharge relationship was affected by ice. Record is good, except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

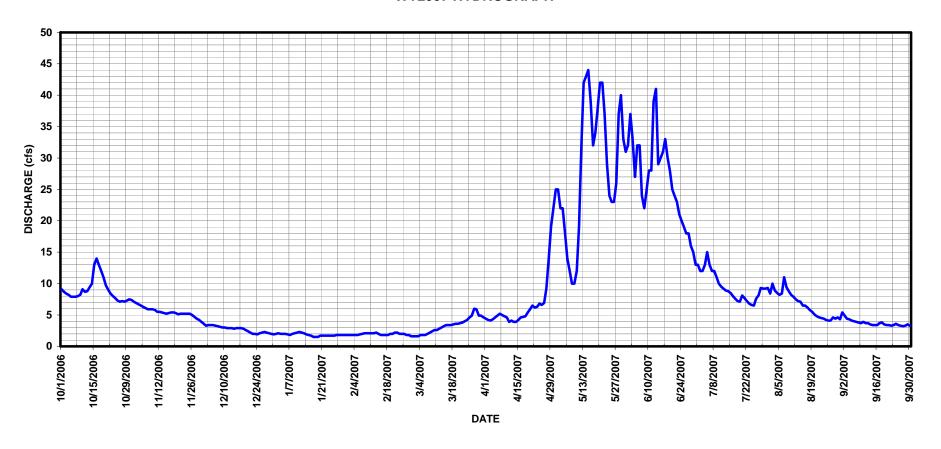
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- SANCRECO03 USED FROM 01-OCT-2006 TO 30-SEP-2007

			210011		ME	CAN VALUE	ES .	10 02112				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	7.1	3.6	2.0	1.8	1.6	4.4	25	32	13	8.4	5.4
2	8.7	6.9	3.3	2.1	1.8	1.6	4.2	25	37	12	10	4.9
3	8.4	6.7	3.4		1.8	1.6	4.1	22	33	12	8.9	4.4
4	8.2	6.5	3.4		1.8	1.8	4.3	22	27	13	8.5	4.3
5	7.9	6.3	3.4		1.8	1.8	4.6	18	32	15	8.2	4.1
6	7.9	6.1	3.3		1.9	1.8	4.9	14	32	13	8.4	4.0
7	7.9	5.9	3.2		2.0	2.0	5.2	12	24	12	11	3.9
8	8.0	5.9			2.1	2.2	5.0	10	22	12	9.4	3.8
9	8.2	5.9	3.0	2.1	2.1	2.4	4.8	10	25	11	8.8	3.7
10	9.1	5.8	3.0		2.1	2.6	4.6	12	28	10	8.2	3.9
11	8.7	5.5	2.9	2.3	2.1	2.6	3.9	19	28	9.5	7.9	3.7
12	8.8	5.5	2.9	2.2	2.1	2.8	4.1	32	39	9.2	7.5	3.7
13	9.4	5.4	2.9		2.2	3.0	3.9	42	41	8.9	7.2	3.5
14	10	5.3			2.0	3.2	3.9	43	29	8.8	7.1	3.4
15	13	5.2	2.9	1.8	1.8	3.4	4.2	44	30	8.5	6.5	3.4
16	14	5.3	2.9		1.8	3.4	4.6	39	31	8.0	6.5	3.4
17	13	5.4	2.9	1.5	1.8	3.4	4.7	32	33	7.6	6.2	3.7
18	12	5.4	2.8	1.5	1.8	3.5	4.8	34	30	7.2	5.8	3.8
19	11	5.3	2.6	1.5	2.0	3.6	5.4	38	28	7.1	5.5	3.5
20	9.7	5.1	2.4		2.0	3.6	5.9	42	25	8.1	5.1	3.4
21	9.0	5.2	2.2		2.2	3.7	6.5	42	24	7.7	4.8	3.4
22	8.4	5.2	2.0		2.2	3.8	6.2	37	23	7.2	4.6	3.3
23	8.0	5.2	2.0		2.0	4.0	6.3	29	21	6.8	4.5	3.4
24	7.7	5.2	1.9	1.7	2.0	4.2	6.8	24	20	6.6	4.4	3.6
25	7.3	5.2	2.1		2.0	4.6	6.6	23	19	6.5	4.2	3.4
26	7.1	5.0	2.2		1.8	4.9	6.9	23	18	7.6	4.1	3.3
27	7.2	4.7	2.3		1.8	6.0	9.2	26	18	8.1	4.1	3.2
28	7.1	4.4	2.2		1.6	5.9	14	37	16	9.3	4.6	3.3
29	7.3	4.2	2.1			4.9	19	40	15	9.2	4.4	3.5
30	7.5	3.9				4.9	22	33	13	9.2	4.6	3.3
31	7.4		1.9	1.8		4.6		31		9.3	4.3	
TOTAL	277.0	164.7	83.6	57.5	54.4	103.4	195.0	880	793	293.4	203.7	111.6
MEAN	8.94	5.49	2.70	1.85	1.94	3.34	6.50	28.4	26.4	9.46	6.57	3.72
AC-FT	549	327	166	114	108	205	387	1750	1570	582	404	221
MAX	14	7.1	3.6	2.3	2.2	6.0	22	44	41	15	11	5.4
MIN	7.1	3.9	1.9	1.5	1.6	1.6	3.9	10	13	6.5	4.1	3.2
03.T WD	2006	moma r	1.000	мпам	4 40 14777			1 0	NO DE			
CAL YR WTR YR	2006	TOTAL	1636		4.48 MAX 8.81 MAX		L6 MIN		AC-FT	3250		
WTR YR	2007	TOTAL	3217.3	MEAN	8.81 MAX	4	14 MIN	1.5	AC-FT	6380		

MAX DISCH: 55.8 CFS AT 19:15 ON May. 14, 2007 GH 4.5 FT. SHIFT -0.01 FT. MAX GH: 4.5 FT. AT 19:15 ON May. 14, 2007

# SAN ISABEL CREEK NEAR CRESTONE CO WY2007 HYDROGRAPH



#### CLOSED BASIN IN SAN LUIS VALLEY

#### 08227000 SAGUACHE CREEK NEAR SAGUACHE, CO

LOCATION.--Lat 38°09'48", long 106°17'24", in SE4sE4 sec. 10, T. 45 N., R 6 E., Saguache County, Hydrologic Unit 13010004, on left bank 0.2 Mi downstream from Middle Creek and 10 mi northwest of Saguache.

PERIOD OF RECORD AND DRAINAGE AREA.--595 mi<sup>2</sup>. Aug. 1910-Sept. 1912, Jun. 1914 to current year. Monthly discharge only for some periods. Water-quality data available, Apr. 1993-Sep. 1995.

**GAGE.**—Graphic water-stage recorder, shaft encoder, and Sutron satellite monitoring equipment including an air temperature sensor and a tipping bucket rain gage in a metal pipe shelter and well. Datum of gage is approximately 8,030 ft. (from topographic map).

REMARKS.--Record is complete and reliable. The stage-discharge relation was affected by ice Nov. 22, 2006 through Mar. 11, 2007. Record is good, except for periods of ice-affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

RATING TABLE. -- SAGSAGCO16 USED FROM 01-OCT-2006 TO 30-SEP-2007

DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP 2.8 2.6 2.2 4.3 2.8 4.3 1.51 2.4 2.8 2.8 a a 2.8 8.5 1.5 2.4 4.5 9.5 2.3 5.5 2.3 2.37 2.4 2.8 2.4 5.5 2.6 ---2.6 2.1 2.6 \_\_\_ \_\_\_

58.1

9.5

61.7

MIN

126 MIN

17 AC-FT

20 AC-FT

89.0

86.4

55.8

8.5

MAX DISCH: 250 CFS AT 11:00 ON Jun. 4, 2007 GH 2.83 FT. SHIFT 0.02 FT. MAX GH: 2.83 FT. AT 11:00 ON Jun. 4, 2007

26.1

34.7

44.9 MAX

73.8 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

27.7

16394 MEAN

26954 MEAN

49.1

TOTAL.

MEAN

AC-FT

WTR YR

CAL YR 2006

MAX

MTN

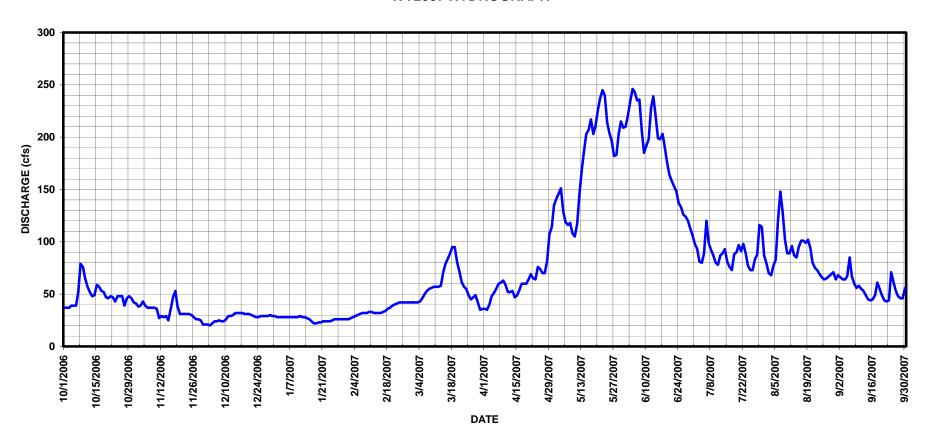
33.6

TOTAL

TOTAL

5.3

# 08227000 SAGUACHE CREEK NEAR SAGUACHE CO WY2007 HYDROGRAPH



# CLOSED BASIN IN SAN LUIS VALLEY, CO

### 08227500 NORTH CRESTONE CREEK NEAR CRESTONE, CO

LOCATION.--Lat 38°00'49", long 105°41'32", Saguache County, Hydrologic Unit 13010003, on right bank in canyon, 1.5 mi. northeast of Crestone, and 3.2 mi. upstream from South Crestone Creek.

DRAINAGE AREA. -- 10.7 mi<sup>2</sup>.

GAGE.--Electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a 48-inch corrugated metal shelter and 36 inch concrete well. A graphic water-stage recorder is operated as a data backup. Altitude of gage is 8,360 ft from topographic map.

REMARKS.--Record is complete and reliable, except for November 13, 2006 through March 26, 2007, when the station was closed for the winter; and April 14, 2007, when floats were affected by ice in well. Record is good, except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

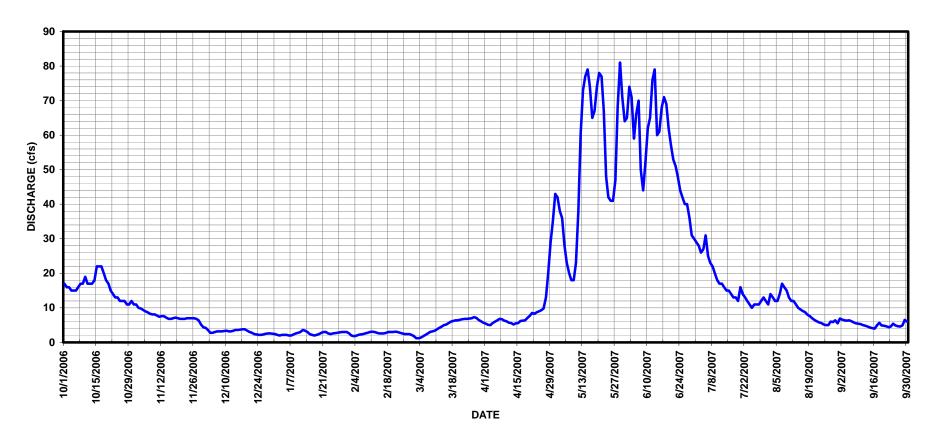
RATING TABLE. -- NOCRESCO11 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES  DAY OCT NOV DEC JAN EER MAR ADD MAY JUN JUL AUG SER													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	17	11	4.2	2.2	2.6	1.8	5.4	43	65	29	11	6.9		
2	16	10	3.6	2.0	2.0	1.2	5.1	42	74	28	14	6.6		
3	16	9.8	2.8	2.2	1.8	1.2	5.0	38	71	26	13	6.4		
4	15	9.4	2.8	2.2	1.9	1.4	5.6	36	59	27	12	6.3		
5	15	9.0	3.0	2.2	2.2	1.8	6.0	28	66	31	12	6.4		
6	15	8.7	3.2	2.0	2.3	2.2	6.4	23	70	25	14	6.1		
7	16	8.3	3.2	2.0	2.4	2.6	6.8	20	50	23	17	5.8		
8	17	8.1	3.2	2.3	2.6	3.0	6.7	18	44	22	16	5.5		
9	17	8.1	3.3	2.6	2.8	3.2	6.3	18	52	20	15	5.4		
10	19	7.8	3.4	2.8	3.0	3.4	6.1	23	62	18	13	5.3		
11	17	7.4	3.2	3.0	3.1	3.8	5.7	38	65	17	12	5.0		
12	17	7.6	3.2	3.6	3.0	4.2	5.6	60	76	17	12	4.8		
13	17	7.6	3.4	3.4	2.8	4.6	5.2	73	79	16	11	4.6		
14	18	7.2	3.6	3.0	2.6	5.0	5.5	77	60	15	10	4.3		
15	22	6.8	3.6	2.4	2.6	5.2	5.6	79	61	15	9.5	4.1		
16	22	6.8	3.7	2.2	2.6	5.6	6.2	74	68	14	9.1	4.0		
17	22	7.0	3.8	2.0	2.8	6.0	6.3	65	71	13	8.7	4.9		
18	20	7.2	3.8	2.2	3.0	6.2	6.4	67	69	13	8.0	5.7		
19	18	7.0	3.4	2.4	3.0	6.4	7.1	74	62	12	7.6	4.9		
20	17	6.8	3.0	2.8	3.0	6.4	7.7	78	57	16	7.0	4.8		
21	15	6.8	2.8	3.0	3.1	6.6	8.5	77	53	14	6.5	4.7		
22	14	6.8	2.4	3.0	3.0	6.7	8.3	67	51	13	6.1	4.4		
23	13	7.0	2.3	2.6	2.8	6.8	8.7	48	48	12	5.8	4.6		
24	13	7.0	2.2	2.4	2.6	6.8	9.0	42	44	11	5.6	5.4		
25	12	7.0	2.2	2.6	2.4	6.9	9.3	41	42	10	5.2	4.9		
26	12	7.0	2.3	2.7	2.4	7.0	9.8	41	40	11	5.0	4.7		
27	12	6.8	2.5	2.8	2.4	7.3	13	47	40	11	5.0	4.6		
28	11	6.4	2.6	2.9	2.2	7.1	20	68	36	11	6.0	4.9		
29	11	5.2	2.6	3.0		6.5	29	81	31	12	5.9	6.5		
30	12	4.4	2.5	3.0		6.1	35	71	30	13	6.4	6.0		
31	11		2.4	3.0		5.7		64		12	5.5			
TOTAL	489	226.0	94.2	80.5	73.0	148.7	271.3	1621	1696	527	294.9	158.5		
MEAN	15.8	7.53	3.04		2.61	4.80	9.04	52.3	56.5	17.0	9.51	5.28		
AC-FT	970	448	187	160	145	295	538	3220	3360	1050	585	314		
MAX	22	11	4.2	3.6	3.1	7.3	35	81	79	31	17	6.9		
MIN	11	4.4	2.2	2.0	1.8	1.2	5.0	18	30	10	5.0	4.0		
CAL YR	2006	TOTAL	3196.0	MEAN	8.76 MAX	4	13 MIN	1.2	AC-FT	6340				
WTR YR	2007	TOTAL	5680.1	MEAN	15.6 MAX	8	31 MIN	1.2	AC-FT	11270				

MAX DISCH: 94.2 CFS AT 19:30 ON May. 14, 2007 GH 1.92 FT. SHIFT -0.02 FT. MAX GH: 1.92 FT. AT 19:30 ON May. 14, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 08227500 NORTH CRESTONE CREEK NEAR CRESTONE CO WY2007 HYDROGRAPH



# CLOSED BASIN IN SAN LUIS VALLEY

#### SOUTH CRESTONE CREEK NEAR CRESTONE, CO

LOCATION.--Lat 37°58′55″, long 105°42′41″, in NE1/4SW1/4 Sec. 12, T.43 N., R.11 E., NMPM, Saguache Co., on right bank, 1 mile SE of Crestone.

DRAINAGE AREA. -- 4.6 mi<sup>2</sup>.

GAGE.--The primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a two-foot diameter corrugated culvert pipe stilling well with small steel shelter on top. A 1-inch intake pipe attaches well to a 2.5 foot Parshall flume. Elevation of gage is 7740 ft.

REMARKS.--Record is complete and reliable, except for Nov. 30 through Dec. 12, 2006, and April 11, 14, 2007, when the well was frozen; and Dec. 13, 2006 through March 26, 2007, when the station was closed for the winter. Stage-discharge relation was affected by ice November 14-16, 2006. Record is good, except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

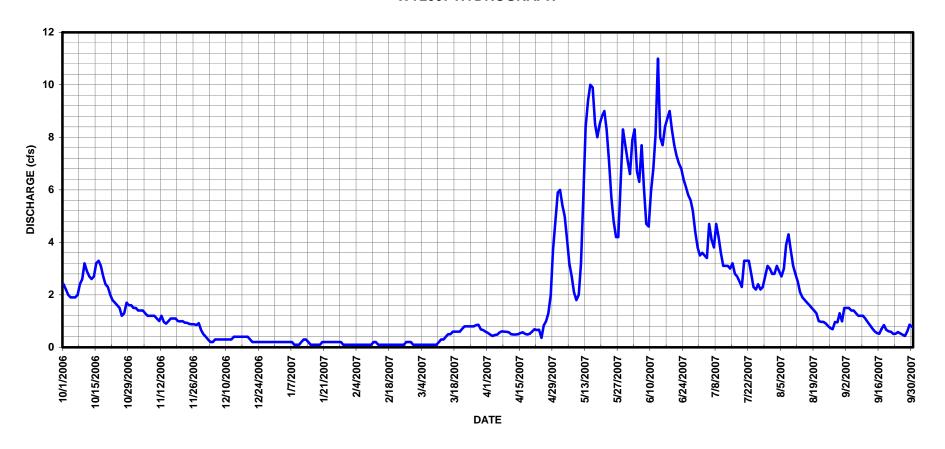
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- SOUCRECOO1 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	CAN VALUE	S					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	1.5	.40	.20	.10	.10	.55	5.9	6.6	3.5	2.8	1.5
2	2.2	1.4	.30	.20	.10	.10	.49	6.0	7.9	3.6	2.8	1.5
3	2.0	1.4	.20	.20	.10	.10	.43	5.4	8.3	3.5	3.1	1.5
4	1.9	1.4	.20	.20	.10	.10	.47	5.0	6.7	3.4	2.9	1.4
5	1.9	1.3	.30	.20	.10	.10	.48	4.1	6.3	4.7	2.7	1.4
6	1.9	1.2	.30	.20	.10	.10	.56	3.2	7.7	4.1	3.0	1.3
7	2.0	1.2	.30	.20	.10	.10	.61	2.7	6.1	3.8	3.9	1.2
8	2.4	1.2	.30	.10	.10	.10	.60	2.1	4.7	4.7	4.3	1.2
9	2.6	1.2	.30	.10	.10	.10	.59	1.8	4.6	4.2	3.7	1.2
10	3.2	1.1	.30	.10	.10	.10	.57	2.0	5.9	3.6	3.1	1.1
11	2.9	1.0	.30	.20	.20	.20	.50	3.2	6.8	3.1	2.8	.96
12	2.7	1.2	.30	.30	.20	.30	.49	5.8	8.1	3.1	2.5	.84
13	2.6	.96	.40	.30	.10	.30	.49	8.4	11	3.1	2.1	.72
14	2.7	.90	.40	.20	.10	.40	.50	9.4	8.0	3.0	1.9	.61
15	3.2	1.0	.40	.10	.10	.50	.54	10	7.7	3.2	1.8	.54
16	3.3	1.1	.40	.10	.10	.50	.57	9.9	8.4	2.8	1.7	.52
17	3.1	1.1	.40	.10	.10	.60	.51	8.5	8.7	2.7	1.6	.70
18	2.7	1.1	.40	.10	.10	.60	.49	8.0	9.0	2.5	1.5	.85
19	2.4	1.0	.40	.10	.10	.60	.52	8.5	8.3	2.3	1.4	.67
20	2.3	.99	.30	.20	.10	.60	.60	8.8	7.7	3.3	1.3	.61
21	2.0	1.0	.20		.10	.70	.69	9.0	7.3	3.3	1.0	.59
22	1.8	.94	.20		.10	.80	.66	8.3	7.0	3.3	.97	.51
23	1.7	.93	.20		.10	.80	.67	7.1	6.8	2.8	.97	.52
24	1.6	.89	.20	.20	.10	.80	.36	5.7	6.4	2.3	.91	.58
25	1.5	.88	.20	.20	.20	.80	.83	4.8	6.1	2.2	.81	.53
26	1.2	.88	.20		.20	.80	1.0	4.2	5.8	2.4	.73	.48
27	1.3	.85	.20		.20	.85	1.3	4.2	5.6	2.2	.69	.43
28	1.7	.92	.20		.10	.86	2.0	6.3	5.2	2.3	.96	.61
29	1.6	.65	.20	.10		.68	3.7	8.3	4.4	2.7	.95	.86
30	1.6	.50	.20	.10		.66	4.8	7.7	3.8	3.1	1.3	.78
31	1.5		.20	.10		.60		7.1		3.0	.99	
TOTAL	67.9	31.69	8.80	5.30	3.30	13.95	26.57	191.4	206.9	97.8	61.18	26.21
MEAN	2.19	1.06	.28	.17	.12	.45	.89	6.17	6.90	3.15	1.97	.87
AC-FT	135	63	17	11	6.5	28	53	380	410	194	121	52
MAX	3.3	1.5	.40	.30	.20	.86	4.8	10	11	4.7	4.3	1.5
MIN	1.2	.50	.20	.10	.10	.10	.36	1.8	3.8	2.2	.69	.43
CAL YR	2006	TOTAL	409.02	MEAN	1.12 MAX	1	.3 MIN	0	AC-FT	811		
WTR YR		TOTAL		MEAN	2.03 MAX		1 MIN		AC-FT	1470		

MAX DISCH: 12.3 CFS AT 01:45 ON Jun. 13, 2007 GH 1.17 FT. SHIFT -0.03 FT. MAX GH: 1.17 FT. AT 01:45 ON Jun. 13, 2007

# SOUTH CRESTONE CREEK NEAR CRESTONE CO WY2007 HYDROGRAPH



#### CLOSED BASIN IN SAN LUIS VALLEY

#### WILLOW CREEK NEAR CRESTONE, CO

LOCATION.--Lat 37°57'29", long 105°41'59", in SE1/4NW1/4 Sec. 20, T.43 N., R.12 E., NMPM, Saguache Co. on right bank, 2 miles SE of Crestone.

DRAINAGE AREA. -- 8.0 mi<sup>2</sup>.

GAGE.--The primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a 2-foot diameter steel culvert well and steel box shelter. Elevation of gage is 7740 ft.

REMARKS.--Record is complete and reliable, except for Nov. 14, 2006 through Mar. 26, 2007, when the station was closed for the winter; Oct.1-3, 2006, when there was missing satellite data; May 28 through June 19, July 4-19, Aug.7 - 22, 2007, when the inlets were plugged and the well was isolated from the stream. Due to fair rating curve, the record is fair, except for periods of no gage-height, which are poor. Peak discharge and gage height were both estimated and are considered poor due to the fact that the inlets were plugged for part of the day that the maximum gage height and maximum flow are believed to have occurred. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

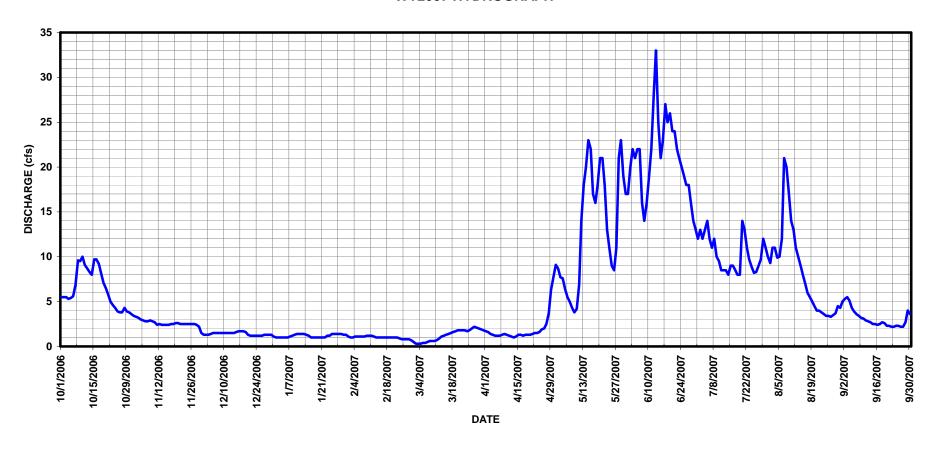
RATING TABLE. -- WILCRECO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	CAN VALUE	ES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	3.4	1.3	1.0	1.1	.50	1.7	9.1	17	12	9.3	5.0
2	5.5	3.3	1.3	1.0	1.0	.30	1.6	8.7	20	13	11	5.3
3	5.5	3.2	1.3	1.0	1.0	.30	1.4	7.7	22	12	11	5.5
4	5.3	3.0		1.0	1.1	.30	1.3	7.6	21	13	9.9	5.1
5	5.4	2.9		1.0	1.1	.40	1.2	6.4	22	14	10	4.3
6	5.6	2.8		1.0	1.1	.40	1.2	5.5	22	12	12	3.9
7	6.9	2.8		1.1	1.1	.50	1.2	5.0	16	11	21	3.6
8	9.6	2.9		1.2	1.1	.60	1.3	4.3	14	12	20	3.4
9	9.5	2.8		1.3	1.2	.60	1.4	3.8	16	10	17	3.2
10	10	2.7		1.4	1.2	.60	1.3	4.2	19	9.5	14	3.1
11	9.1	2.4		1.4	1.2	.70	1.2	6.9	22	8.5	13	2.9
12	8.7	2.5		1.4	1.1	.90	1.1	14	28	8.5	11	2.8
13	8.3	2.4		1.4	1.0	1.1	1.0	18	33	8.5	10	2.7
14	8.0	2.4		1.3	1.0	1.2	1.1	20	25	8.0	9.0	2.5
15	9.7	2.4		1.2	1.0	1.3	1.3	23	21	9.0	8.0	2.5
16	9.7	2.4			1.0	1.4	1.3	22	23	9.0	7.0	2.4
17	9.2	2.5			1.0	1.5	1.2	17	27	8.5	6.0	2.5
18	8.1	2.5			1.0	1.6	1.3	16	25	8.0	5.5	2.7
19	7.1	2.6		1.0	1.0	1.7	1.3	18	26	8.0	5.0	2.6
20	6.5	2.6			1.0	1.8	1.3	21	24	14	4.5	2.3
21	5.8	2.5			1.0	1.8	1.4	21	24	13	4.0	2.3
22	5.0	2.5			1.0	1.8	1.5 1.5	18	22	11	4.0	2.2
23	4.6	2.5 2.5			.90	1.8		13 11	21	9.7 8.9	3.8	2.2
24 25	4.3 3.9	2.5			.80	1.7 1.8	1.6 1.9	9.0	20 19	8.9	3.6 3.4	2.3
26	3.8	2.5			.80	2.0	2.0	8.5	19	8.3	3.4	2.3
27	3.8	2.5			.80	2.0	2.0	11	18	9.0	3.3	2.2
28	4.3	2.3			.70	2.2	3.7	21	16	9.0	3.5	2.7
29	3.9	2.4				2.1	6.3	23	14	12	3.7	4.0
30	3.8	1.5				1.9	7.7	19	13	11	4.5	3.6
31	3.6					1.8		17		10	4.3	
JΙ	3.0		1.1	1.3		1.0		Ι/		10	4.5	
TOTAL	200.0	78.1	43.4	36.7	28.10	38.60	55.8	409.7	628	319.3	255.7	94.3
MEAN	6.45	2.60	1.40	1.18	1.00	1.25	1.86	13.2	20.9	10.3	8.25	3.14
AC-FT	397	155			56	77	111	813	1250	633	507	187
MAX	10	3.4	1.7	1.4	1.2	2.2	7.7	23	33	14	21	5.5
MIN	3.6	1.5	1.1	1.0	.70	.30	1.0	3.8	13	8.0	3.3	2.2
CAL YR	2006	TOTAL	1459.04	MEAN	4.00 MAX		76 MIN	.38	AC-FT	2890		
WTR YR		TOTAL	2187.7		5.99 MAX		33 MIN		AC-FT	4340		
110	2007	1011111	2207.7		0.55 11111	,	00 11111	.50		1010		

MAX DISCH: 44.6 CFS AT 01:00 ON Jun. 13, 2007 GH 3.38 FT. SHIFT -0.19 FT. (Estimated) MAX GH: 3.38 FT. AT 02:45 ON May. 29, 2007 (Estimated)

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# WILLOW CREEK NEAR CRESTONE CO WY2007 HYDROGRAPH



# CLOSED BASIN IN SAN LUIS VALLEY

### SPANISH CREEK NEAR CRESTONE, CO

LOCATION.--Lat 37°57′10″, long 105°39′42″, in NE1/4SW1/4 Sec. 21, T.43 N., R.12 E., NMPM, Saguache Co., on left bank, 3 ½ miles SE of Crestone.

DRAINAGE AREA. -- 2.4 mi<sup>2</sup>.

GAGE.--The primary record is generated by an electronic data logger with satellite transmitter, which records
 gage-height data from a float-operated shaft encoder in a 2-foot culvert pipe well and small steel box
 shelter. Elevation of gage is 8240 ft.

REMARKS.--Record is complete and reliable, except for Nov. 14, 2006 through March 26, 2007, when the station was closed for the winter; and April 21, 2007, when satellite data failed to transmit for four hours. Record is fair, except for periods of no gage-height record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

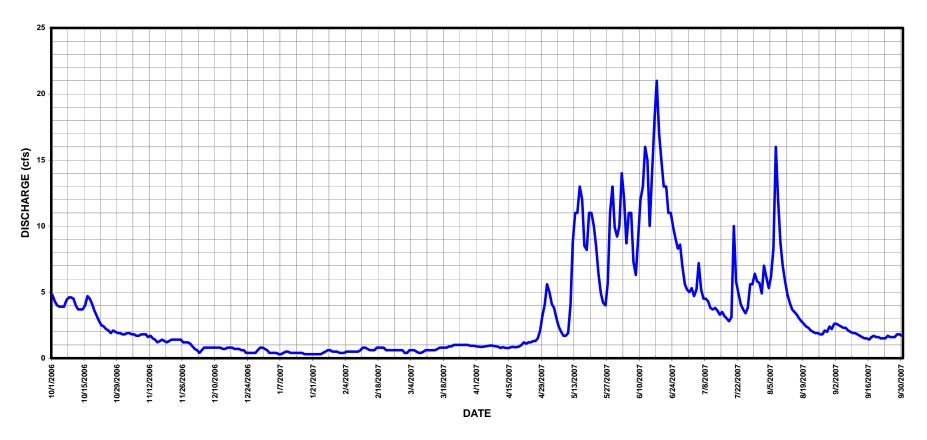
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- SPACRECO04 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCH	ANOD, IN C	ME	AN VALUI		TO DELTE	INDDIK 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	1.8	.70	.60	.40	.40	.88	5.6	10	5.0	4.9	2.6
2	4.3	1.9	.60		.40	.40	.87	5.0	14	5.3	7.0	2.6
3	4.0	1.9	.40		.40	.60	.85	4.1	12	4.7	6.1	2.5
4	3.9	1.8			.50	.60	.89	3.8	8.7	5.2	5.3	2.4
5	3.9	1.8	.80		.50	.60	.91	3.0	11	7.2	6.2	2.3
6	3.9	1.7			.50	.50	.95	2.4	11	5.2	8.3	2.3
7	4.4	1.7			.50	.40	.97	2.0	7.3	4.5	16	2.1
8	4.6	1.8	.80		.50	.40	.93	1.7	6.3	4.5	12	2.0
9	4.6	1.8			.50	.50	.90	1.7	9.0	4.3	8.7	1.9
10	4.5	1.8			.60	.60	.87	1.9	12	3.8	7.0	1.9
11	4.0	1.6			.80	.60	.78	4.1	13	3.7	5.8	1.8
12	3.7	1.7			.80	.60	.83	8.7	16	3.8	4.8	1.7
13	3.7	1.5	.70		.70	.60	.79	11	15	3.6	4.2	1.6
14	3.7	1.4			.60	.60	.76	11	10	3.3	3.7	1.5
15	4.0	1.2			.60	.70	.80	13	14	3.5	3.5	1.5
16	4.7	1.3			.60	.80	.86	12	18	3.2	3.3	1.4
17	4.5	1.4			.80	.80	.83	8.5	21	3.0	3.0	1.6
18	4.1	1.3			.80	.80	.83	8.2	17	2.8	2.8	1.7
19	3.6	1.2			.80	.80	.88	11	15	3.1	2.6	1.6
20	3.2	1.3			.80	.90	1.0	11	13	10	2.4	1.6
21	2.8	1.4			.60	.90	1.2	10	13	5.8	2.3	1.5
22	2.5	1.4			.60	1.0	1.1	8.5	11	4.9	2.1	1.5
23	2.4	1.4			.60	1.0	1.2	6.4	11	4.1	2.0	1.5
24	2.2	1.4			.60	1.0	1.2	4.9	9.9	3.7	1.9	1.7
25	2.1	1.4			.60	1.0	1.3	4.2	9.1	3.4	1.9	1.6
26	1.9	1.2			.60	1.0	1.3	4.0	8.3	3.8	1.8	1.6
27	2.1	1.2			.60	1.0	1.5	5.7	8.6	5.6	1.8	1.6
28	2.0	1.2			.60	1.0	2.1	11	6.9	5.6	2.1	1.8
29	1.9	1.1				.94	3.2	13	5.6	6.4	2.0	1.8
30	1.9	.90				.94	4.1	9.9	5.2	5.8	2.4	1.7
31	1.8		.70	.50		.93		9.2		5.7	2.2	
TOTAL	105.7	44.50	20.70	12.60	16.90	22.91	35.58	216.5	341.9	144.5	140.1	54.9
MEAN	3.41	1.48	.67	.41	.60	.74	1.19	6.98	11.4	4.66	4.52	1.83
AC-FT	210	88	41	25	34	45	71	429	678	287	278	109
MAX	4.8	1.9			.80	1.0	4.1	13	21	10	16	2.6
MIN	1.8	.90			.40	.40	.76	1.7	5.2	2.8	1.8	1.4
CAL YR	2006	TOTAL	765.26	MEAN	2.10 MAX	,	20 MIN	.20	AC-FT	1520		
WTR YR	2007	TOTAL	1156.79	MEAN	3.17 MAX	2	21 MIN	.3	AC-FT	2290		

MAX DISCH: 33.5 CFS AT 20:45 ON Jun. 16, 2007 GH 3.74 FT. GH CORR. -0.01 FT. SHIFT -0.03 FT. MAX GH: 3.73 FT. (GH CORR. -0.01 FT. APPLIED) AT 20:45 ON Jun. 16, 2007

# SPANISH CREEK NEAR CRESTONE CO WY2007 HYDROGRAPH



# CLOSED BASIN IN SAN LUIS VALLEY

#### 08229500 COTTONWOOD CREEK NEAR CRESTONE, CO

LOCATION.--Lat 37°56′51″, long 105°39′05″, in SE1/4NE1/4 Sec. 22, T.43 N., R.12 E., NMPM, Saguache Co., on left bank, 5 miles SE of Crestone.

DRAINAGE AREA. -- 5.0 mi<sup>2</sup>.

WTR YR 2007

TOTAL

**GAGE.--**The primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a 3 ft. by 3 ft. timber shelter and well. This gage is the original gage put in by the USGS in 1936.

REMARKS.--Record is complete and reliable, except for Nov. 13, 2006, when float was affected by ice in well; and Nov. 14, 2006 through Mar. 26, 2007, when the station was closed for the winter. Stage-discharge relation was affected by ice April 14, 2007. Record is good, except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- COCRESCO04 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES  DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	8.7	4.5	2.0	1.5	1.6	1.3	1.6	9.6	25	14	9.0	4.6		
2	8.0	4.3	1.8	1.5	1.5	1.1	1.6	8.6	30	14	11	4.2		
3	7.5	4.3	1.5	1.5	1.6	1.0	1.6	8.1	29	13	9.6	4.2		
4	7.3	4.2	1.6	1.5	1.6	1.0	1.7	7.7	23	14	8.7	4.4		
5	7.2	4.1	1.7	1.5	1.6	1.0	1.7	6.1	27	15	9.9	4.6		
6	7.2	4.0	1.7	1.5	1.6	1.1	1.8	5.3	27	13	13	4.5		
7	10	4.0	1.7	1.6	1.6	1.1	1.8	4.8	19	12	19	4.2		
8	12	4.0	1.7	1.6	1.6	1.1	1.8	4.2	18	11	14	4.0		
9	11	3.9	1.8	1.6	1.6	1.3	1.7	4.1	23	11	12	3.9		
10	10	3.8	1.8	1.6	1.7	1.3	1.7	5.2	29	10	9.9	4.1		
11	9.2	3.6	1.8	1.6	1.7	1.3	1.6	11	31	13	8.6	3.9		
12	8.4	3.7	1.8	1.8	1.6	1.4	1.6	21	34	12	7.6	3.7		
13	8.5	3.5	1.8	1.8	1.5	1.4	1.6	23	32	10	7.0	3.5		
14	8.7	3.5	1.9	1.7	1.5	1.4	1.6	23	25	9.5	6.6	3.4		
15	10	3.4		1.6	1.5	1.5	1.7	24	30	9.9	6.0	3.2		
16	11	3.5	1.9	1.5	1.5	1.5	1.8	23	33	9.1	5.6	3.2		
17	9.8	3.5	2.0	1.4	1.5	1.6	1.7	18	36	8.4	5.3	3.7		
18	8.2	3.5		1.5	1.5	1.6	1.7	18	33	7.9	5.0	3.8		
19	7.0	3.5		1.6	1.5	1.6	1.8	22	30	8.6	4.7	3.5		
20	7.0	3.5		1.6	1.5	1.7	1.9	24	29	17	4.4	3.4		
21	6.2	3.5		1.6	1.5	1.7	2.0	24	27	12	4.1	3.4		
22	5.4	3.6			1.5	1.7	1.9	22	25	9.7	4.0	3.2		
23	5.3	3.6			1.5	1.7	2.0	16	24	8.6	3.8	3.3		
24	5.1	3.6			1.5	1.7	2.0	13	23	8.1	3.6	3.6		
25	4.8	3.6		1.6	1.4	1.8	2.2	12	21	7.2	3.5	3.4		
26	4.5	3.6			1.3	1.8	2.4	12	20	7.7	3.4	3.2		
27	5.1	3.5		1.6	1.3	1.9	2.8	16	20	8.8	3.4	3.1		
28	4.9	3.5		1.6	1.3	1.9	4.1	25	16	8.2	4.0	3.2		
29	4.9	2.5				1.7	6.4	28	14	8.8	3.8	3.4		
30	4.8	2.0		1.7		1.7	7.4	24	14	8.8	4.4	3.2		
31	4.6		1.6	1.7		1.6		24		10	4.1			
TOTAL	232.3	109.3	52.8	49.3	42.6	45.5	67.2	486.7	767	330.3	219.0	111.0		
MEAN	7.49	3.64	1.70	1.59	1.52	1.47	2.24	15.7	25.6	10.7	7.06	3.70		
AC-FT	461	217	105	98	84	90	133	965	1520	655	434	220		
MAX	12	4.5	2.0	1.8	1.7	1.9	7.4	28	36	17	19	4.6		
MIN	4.5	2.0	1.4	1.4	1.3	1.0	1.6	4.1	14	7.2	3.4	3.1		
CAL YR	2006	TOTAL	1603.55	MEAN	4.39 MAX	2	6 MIN	. 4	AC-FT	3180				

MAX DISCH: 44.8 CFS AT 19:45 ON Jun. 16, 2007 GH 2.74 FT. SHIFT -0.11 FT. MAX GH: 2.74 FT. AT 19:45 ON Jun. 16, 2007

6.88 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

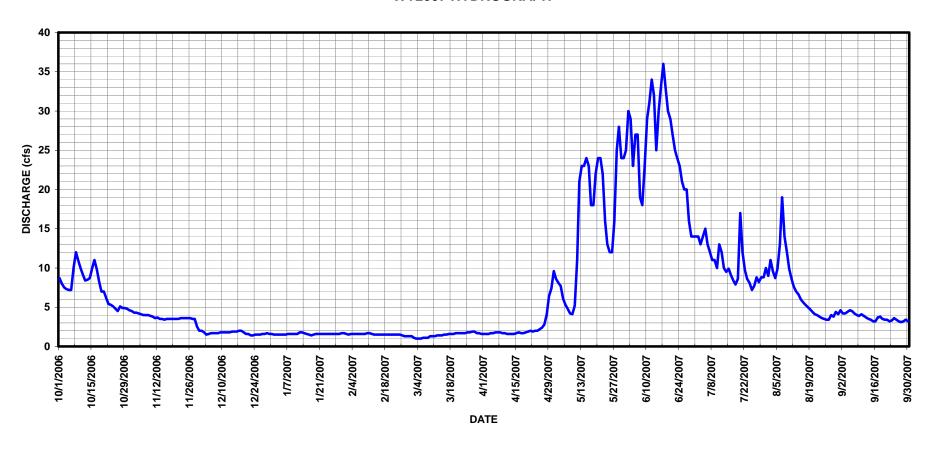
2513 MEAN

36 MIN

1 AC-FT

4980

# 08229500 COTTONWOOD CREEK NEAR CRESTONE CO WY2007 HYDROGRAPH



#### CLOSED BASIN IN SAN LUIS VALLEY

### DEADMAN CREEK NEAR CRESTONE, CO

LOCATION.--Lat 37°53′05″, long 105°38′47″, in NE1/4, SE1/4, Sec. 3, T.42 N., R.12 E., NMPM, Saguache Co., on right bank 8 miles SE of Crestone.

DRAINAGE AREA. -- 8.4 mi<sup>2</sup>.

GAGE.--The primary record is generated by an electronic data logger with satellite transmitter, which records
 gage-height data from a float-operated shaft encoder in a 2-foot culvert pipe stilling well with a small,
 steel, box-like shelter on top. The well is connected to a standard 6-foot Parshall Flume in good
 condition. Elevation of gage is 7800 ft.

REMARKS.--Record is complete and reliable, except for Nov. 11-21 2006, Mar. 30, 31, April 1-5, 2007, when the well was frozen; Nov. 22, 2006 through Mar. 29, 2007, when the station was closed for the winter; and May 19, 2007, when there was missing satellite data. Record is good except for periods of no gage-height record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

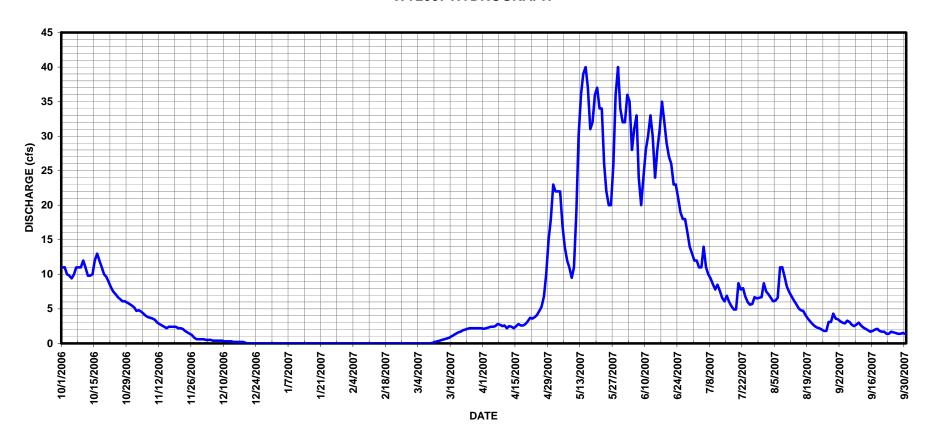
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- DEDCRECO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

					,	MEAN	VALUES						
DAY	OCT	NOV	DEC	JAN	FE	B	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	5.2	.60	0		0	0	2.1	23	32	12	7.5	3.5
2	11	4.7	.50	0		0	0	2.2	22	36	12	7.1	3.2
3	10	4.8	.50	0		0	0	2.3	22	35	11	6.6	3.0
4	9.8	4.6	.50	0		0	0	2.4	22	28	11	6.1	2.9
5	9.4	4.3	.40	0		0	0	2.4	17	31	14	6.2	3.3
6	10	4.0	.40	0		0	0	2.5	14	33	11	6.6	3.1
7	11	3.8	.40	0		0	0	2.8	12	24	10	11	2.7
8	11	3.7		0		0	0	2.7	11	20	9.4	11	2.5
9	11	3.6	.40	0		0	0	2.5	9.5	24	8.6	9.6	2.7
10	12	3.4	.30	0			.10	2.6	11	28	7.8	8.2	3.0
11	11	3.0	.30	0			.20	2.2	19	30	8.5	7.4	2.6
12	9.8	2.8	.30	0			.30	2.5	30	33	7.6	6.8	2.3
13	9.8	2.6	.30	0			.40	2.4	36	30	6.6	6.2	2.1
14	10	2.4		0			.50	2.2	39	24	6.1	5.7	1.9
15	12	2.2		0			.60	2.5	40	28	6.9	5.1	1.7
16	13	2.4	.20	0			.70	2.8	37	31	6.0	4.8	1.8
17	12	2.4	.20	0			.80	2.6	31	35	5.4	4.7	2.0
18	11	2.4	.20	0			1.0	2.6	32	32	4.9	4.1	2.1
19	10	2.4	.10	0			1.2	2.8	36	29	4.9	3.6	1.8
20	9.6	2.2		0			1.4	3.2	37	27	8.7	3.2	1.7
21	8.9	2.2		0			1.6	3.7	34	26	7.8	2.8	1.7
22	8.1	2.1		0			1.7	3.6	34	23	8.0	2.5	1.4
23	7.5	1.8		0			1.9	3.8	26	23	6.8	2.3	1.4
24	7.1	1.6	0	0			2.0	4.1	22	21	6.0	2.2	1.7
25	6.7	1.4	0	0			2.1	4.7	20	19	5.6	2.0	1.6
26	6.4	1.2		0			2.2	5.3	20	18	5.7	1.8	1.5
27 28	6.1 6.1	.80	0	0			2.2	6.8 10	26 36	18 16	6.7 6.5	1.8 3.1	1.4 1.4
20 29	5.9	.60	0	0			2.2	15	40	14	6.6	3.1	1.4
30	5.7	.60	0	0			2.2	18	34	13	6.7	4.3	1.4
31	5.5		0	0			2.2	10	32		8.7	3.6	
21	3.3		U	0		_	2.2		32		0.7	3.0	
TOTAL	288.4	79.80	6.40	0		0 29	.70	125.3	824.5	781	247.5	161.0	64.9
MEAN	9.30	2.66		0		0	.96	4.18	26.6	26.0	7.98	5.19	2.16
AC-FT	572	158		0		0	59	249	1640	1550	491	319	129
MAX	13	5.2		0		0	2.2	18	40	36	14	11	3.5
MIN	5.5	.60	0	0		0	0	2.1	9.5	13	4.9	1.8	1.4
CAL YR	2006	TOTAL	1360.89	MEAN		MAX	23	MIN		AC-FT	2700		
WTR YR	2007	TOTAL	2608.5	MEAN	7.15	MAX	40	MIN	0	AC-FT	5170		

MAX DISCH: 50.3 CFS AT 23:00 ON May. 28, 2007 GH 1.52 FT. GH CORR. 0.01 FT. SHIFT 0.06 FT. MAX GH: 1.53 FT. (GH CORR. 0.01 FT. APPLIED) AT 23:00 ON May. 28, 2007

# DEADMAN CREEK NEAR CRESTONE CO WY2007 HYDROGRAPH



# LITTLE SPRING CREEK AT MEDANO RANCH NEAR MOSCA, CO

LOCATION.--Lat 37°42'49", long 105°38'55", in Alamosa county, in the NE4SW4, sec. 15, T.40 N., R.12 E., New Mexico Principal Meridian.

DRAINAGE AREA AND PERIOD OF RECORD. -- 0.2 mi<sup>2</sup>. Flow primarily due to groundwater accretions. First record produced for water year 2000.

GAGE. -- Record is generated by a float-operated Sutron SDR shaft encoder, which records gage-height data in a 30inch diameter pipe stilling well and CMP extension for gage shelter. An SDI-12 radio bridge was installed on Oct. 17, 2006 to interface the SDR to the satellite telemetry system at Big Spring Creek at Medano Ranch near Mosca gaging station. The well intake pipe is attached to a 2-foot Parshall Flume with staff gage.

REMARKS.--Record is complete and reliable, except for November 29 - December 11, 2006, when the well was frozen; and December 12, 2006 - April 6, 2007, when the station was closed for the winter. Record is good except for periods of no gage-height record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

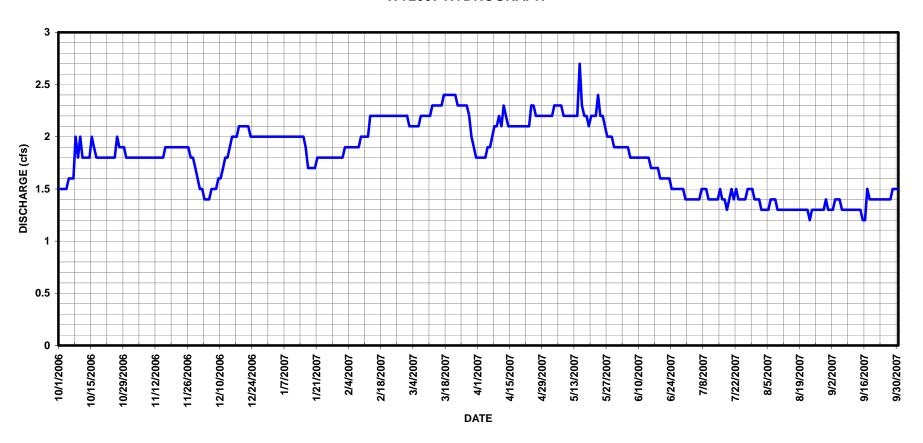
RATING TABLE. -- LITSPGC001 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHA	, IN C	ME.	AN VALUES		IO DELIE	FIDER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.8	1.5	2.0	1.8	2.2	1.8	2.2	1.9	1.4	1.4	1.3
2	1.5	1.8	1.5	2.0	1.9	2.1	1.8	2.2	1.9	1.4	1.3	1.3
3	1.5	1.8	1.4	2.0	1.9	2.1	1.8	2.2	1.9	1.4	1.3	1.4
4	1.5	1.8	1.4	2.0	1.9	2.1	1.8	2.3	1.9	1.4	1.3	1.4
5	1.6	1.8	1.4	2.0	1.9	2.1	1.9	2.3	1.9	1.4	1.3	1.4
6	1.6	1.8	1.5	2.0	1.9	2.1	1.9	2.3	1.8	1.4	1.4	1.3
7	1.6	1.8	1.5	2.0	1.9	2.2	2.0	2.3	1.8	1.5	1.4	1.3
8	2.0	1.8	1.5	2.0	1.9	2.2	2.1	2.2	1.8	1.5	1.4	1.3
9	1.8	1.8	1.6	2.0	2.0	2.2	2.1	2.2	1.8	1.5	1.3	1.3
10	2.0	1.8	1.6	2.0	2.0	2.2	2.2	2.2	1.8	1.4	1.3	1.3
11	1.8	1.8	1.7	2.0	2.0	2.2	2.1	2.2	1.8	1.4	1.3	1.3
12	1.8	1.8	1.8	2.0	2.0	2.3	2.3	2.2	1.8	1.4	1.3	1.3
13	1.8	1.8	1.8	2.0	2.2	2.3	2.2	2.2	1.8	1.4	1.3	1.3
14	1.8	1.8	1.9	2.0	2.2	2.3	2.1	2.2	1.8	1.4	1.3	1.3
15	2.0	1.8	2.0	2.0	2.2	2.3	2.1	2.7	1.7	1.5	1.3	1.2
16	1.9	1.9	2.0	1.9	2.2	2.3	2.1	2.3	1.7	1.4	1.3	1.2
17	1.8	1.9	2.0	1.7	2.2	2.4	2.1	2.2	1.7	1.4	1.3	1.5
18	1.8	1.9	2.1	1.7	2.2	2.4	2.1	2.2	1.7	1.3	1.3	1.4
19	1.8	1.9	2.1	1.7	2.2	2.4	2.1	2.1	1.6	1.4	1.3	1.4
20	1.8	1.9	2.1	1.7	2.2	2.4	2.1	2.2	1.6	1.5	1.3	1.4
21	1.8	1.9	2.1	1.8	2.2	2.4	2.1	2.2	1.6	1.4	1.3	1.4
22	1.8	1.9	2.1	1.8	2.2	2.4	2.1	2.2	1.6	1.5	1.3	1.4
23	1.8	1.9	2.0	1.8	2.2	2.3	2.1	2.4	1.6	1.4	1.2	1.4
24	1.8	1.9	2.0	1.8	2.2	2.3	2.3	2.2	1.5	1.4	1.3	1.4
25	1.8	1.9	2.0	1.8	2.2	2.3	2.3	2.2	1.5	1.4	1.3	1.4
26	2.0	1.9	2.0	1.8	2.2	2.3	2.2	2.1	1.5	1.4	1.3	1.4
27	1.9	1.8	2.0	1.8	2.2	2.3	2.2	2.0	1.5	1.5	1.3	1.4
28	1.9	1.8	2.0	1.8	2.2	2.2	2.2	2.0	1.5	1.5	1.3	1.5
29	1.9	1.7	2.0	1.8		2.0	2.2	2.0	1.5	1.5	1.3	1.5
30	1.8	1.6	2.0	1.8		1.9	2.2	1.9	1.4	1.4	1.4	1.5
31	1.8		2.0	1.8		1.8		1.9		1.4	1.3	
TOTAL	55.2	54.8	56.6	58.5	58.3	69.0	62.6	68.0	50.9	44.2	40.7	40.9
MEAN	1.78	1.83	1.83	1.89	2.08	2.23	2.09	2.19	1.70	1.43	1.31	1.36
AC-FT	109	109	112	116	116	137	124	135	101	88	81	81
MAX	2.0	1.9	2.1	2.0	2.2	2.4	2.3	2.7	1.9	1.5	1.4	1.5
MIN	1.5	1.6	1.4	1.7	1.8	1.8	1.8	1.9	1.4	1.3	1.2	1.2
CAL YR	2006	TOTAL	567 1		1.55 MAX	2.3			AC-FT	1120		
WTR YR	2007	TOTAL	659.7	MEAN	1.81 MAX	2.7	7 MIN	1.2	AC-FT	1310		

MAX DISCH: 5.34 CFS AT 19:00 ON May. 15, 2007 GH 0.79 FT. SHIFT -0.02 FT. MAX GH: 0.79 FT. AT 19:00 ON May. 15, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# LITTLE SPRING CREEK AT MEDANO RANCH NEAR MOSCA CO WY2007 HYDROGRAPH



#### CLOSED BASIN IN SAN LUIS VALLEY

#### BIG SPRING CREEK AT MEDANO RANCH NEAR MOSCA CO

LOCATION.--Lat 37°44′03", long 105°39′50", in NE ¼ NW ¼ Sec. 9, T.40 N., R.12 E., NMPM, Alamosa Co., on left bank approximately ¼ mile above Los Ojos Diversion.

DRAINAGE AREA AND PERIOD OF RECORD.--0.3 mi<sup>2</sup>. First record produced in 1999. Flow primarily due to groundwater accretions.

GAGE.--Record was generated by a float-operated Sutron SDR, which records gage-height data in a 30-inch diameter pipe well and CMP extension for gage shelter. The SDR was replaced with a shaft encoder and satellite telemetry system on Oct. 17, 2006. The intake pipe is attached to a 4-foot Parshall Flume with staff gage. The Parshall Flume was modified by placing a steel V-ramp into the converging section of flume on July 24, 2006. Elevation of gage is 7580 ft.

REMARKS.--Record is complete and reliable for the water year, except for Dec. 3-11, 2006, when the shaft encoder float sank; and Dec. 12, 2006 through Mar. 29, 2007, when the station was closed for the winter. The stage-discharge relation was affected by ice Oct. 27, Nov. 15, 30, Dec. 1, 2, 2006. Record is fair due to flume submergence and rating uncertainty, except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- BIGSPGC002 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	5.5	5.4	5.4	5.5	6.3	6.7	6.8	6.4	5.7	5.6	5.4
2	5.4	5.6	5.4	5.4	5.5	6.3	6.6	7.0	6.4	5.6	5.3	5.4
3	5.4	5.7	5.4	5.4	5.5	6.3	6.6	6.8	6.4	5.6	5.5	5.5
4	5.5	5.7	5.4	5.4	5.6	6.4	6.6	6.6	6.4	5.5	5.6	5.5
5	5.5	5.6	5.3	5.4	5.6	6.4	6.6	6.7	6.4	5.8	5.4	5.3
6	5.5	5.6	5.3	5.4	5.7	6.4	6.7	6.8	6.2	5.7	5.6	5.4
7	5.4	5.6	5.3	5.3	5.7	6.4	6.7	6.9	6.4	5.6	6.2	5.2
8	7.3	5.6	5.3	5.3	5.7	6.4	7.4	6.7	6.4	5.6	5.8	5.2
9	6.7	5.6	5.3	5.3	5.7	6.4	7.2	6.7	6.2	5.5	5.5	5.3
10	7.1	5.7	5.3	5.3	5.8	6.4	7.0	6.6	6.2	5.4	5.3	5.5
11	5.9	5.7	5.4	5.2	5.8	6.4	6.8	6.5	6.2	5.4	5.4	5.5
12	5.7	5.7	5.4	5.2	5.8	6.4	7.6	6.5	6.5	5.5	5.4	5.3
13	5.7	5.7	5.4	5.2	5.9	6.4	7.3	6.5	6.6	5.4	5.5	5.3
14	5.8	5.7	5.4	5.2	5.9	6.5	7.2	6.6	6.5	5.4	5.5	5.2
15	6.3	5.7	5.4	5.2	5.9	6.5	7.0	7.1	6.3	5.8	5.3	5.1
16	5.8	5.6	5.4	5.2	6.0	6.6	6.8	6.8	6.3	5.6	5.8	5.2
17	5.6	5.5	5.4	5.2	6.0	6.6	6.9	6.7	6.2	5.6	5.9	6.0
18	5.6	5.5	5.4	5.2	6.0	6.6	6.7	6.9	6.0	5.3	5.4	5.9
19	5.7	5.4	5.4	5.2	6.0	6.6	6.6	6.6	6.1	5.4	5.2	5.3
20	5.7	5.5	5.4	5.2	6.2	6.7	6.7	6.9	6.0	6.1	5.2	5.3
21	5.6	5.5	5.4	5.2	6.2	6.7	6.7	6.8	5.9	5.6	5.2	5.3
22	5.6	5.5	5.4	5.2	6.2	6.7	6.8	6.6	6.0	5.5	5.1	5.2
23	5.6	5.5	5.3	5.2	6.2	6.7	6.5	7.3	6.0	5.6	5.0	5.2
24	5.6	5.5	5.3	5.2	6.2	6.7	7.7	7.0	5.9	5.3	5.3	5.3
25	5.7	5.6	5.3	5.3	6.2	6.8	8.2	6.8	5.9	5.4	5.1	5.2
26	6.6	5.6	5.3	5.3	6.2	6.8	7.5	6.6	5.9	5.5	5.0	5.2
27	6.3	5.6	5.3	5.3	6.2	6.8	6.9	6.5	5.9	5.6	5.2	5.3
28	6.2	5.6	5.3	5.4	6.3	6.7	6.8	6.5	6.0	5.7	5.4	5.5
29	6.0	5.5	5.3	5.4		6.7	6.7	6.5	6.0	5.5	6.6	5.7
30	5.7	5.5	5.3	5.4		6.6	6.8	6.5	5.8	5.6	6.2	5.5
31	5.5		5.3	5.4		6.7		6.4		5.5	5.4	
TOTAL	181.4	167.6	165.9	163.9	165.5	202.9	208.3	208.2	185.4	172.3	169.9	161.2
MEAN	5.85	5.59	5.35	5.29	5.91	6.55	6.94	6.72	6.18	5.56	5.48	5.37
AC-FT	360	332	329	325	328	402	413	413	368	342	337	320
MAX	7.3	5.7	5.4		6.3	6.8	8.2	7.3	6.6	6.1	6.6	6.0
MIN	5.4	5.4	5.3	5.2	5.5	6.3	6.5	6.4	5.8	5.3	5.0	5.1
CAL YR	2006	TOTAL	2147.4	MEAN	5.88 MAX	7.	.7 MIN	4.8	AC-FT	4260		

MAX DISCH: 13.7 CFS AT 20:00 ON Aug. 29, 2007 GH 1.57 FT. SHIFT -0.04 FT. MAX GH: 1.57 FT. AT 20:00 ON Aug. 29, 2007

5.90 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

2152.5 MEAN

WTR YR 2007

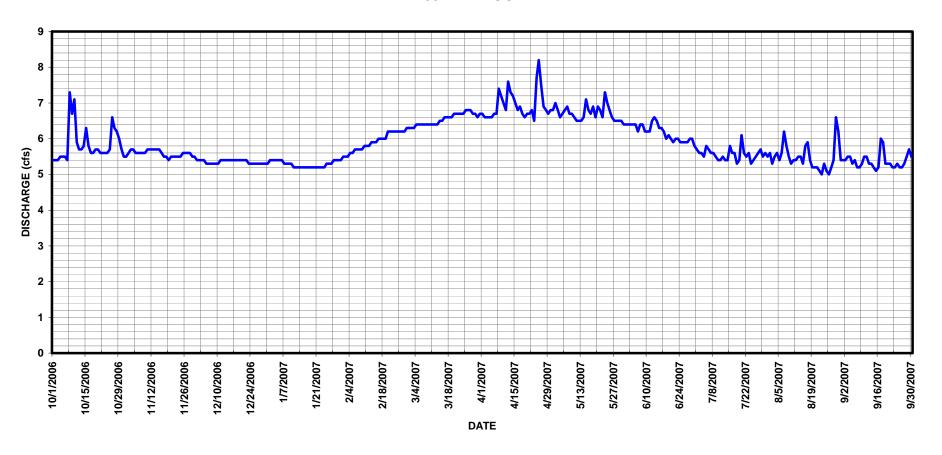
TOTAL

8.2 MIN

5.0 AC-FT

4270

# BIG SPRING CREEK AT MEDANO RANCH NEAR MOSCA CO WY2007 HYDROGRAPH



# CLOSED BASIN IN SAN LUIS VALLEY, CO

### 08230500 CARNERO CREEK NEAR LA GARITA, CO

LOCATION.--Lat 37°51'39", long 106°18'55", in SW4NE4 sec 28, T.42 N., R.6 E., (projected) Saguache County, Hydrologic Unit 13010004, on left bank 4.5 mi. northwest of La Garita and 5.5 mi. downstream from North Fork.

DRAINAGE AREA. -- 117 mi<sup>2</sup>.

GAGE. -- Primary record is generated by an electronic data logger with satellite transmitter, which records gageheight data from a float-operated shaft encoder, in a 42 inch diameter metal shelter and well. A graphic water-stage recorder is operated as a data backup. Datum of gage is 8,150 ft. from topographic map.

REMARKS.--Record is complete and reliable, except for November 24, 2006 to March 16, 2007, when the station was closed for the winter. Stage-discharge relation was affected by ice Oct. 27, Nov. 2, 3, 11-23, 2006, and Mar. 30, 31, Apr. 13, 14, 2007. Control slightly submerged October 7-12, 2006 by beaver dam. Record is good, except for periods of no gage-height, ice-affected, and control-submerged record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

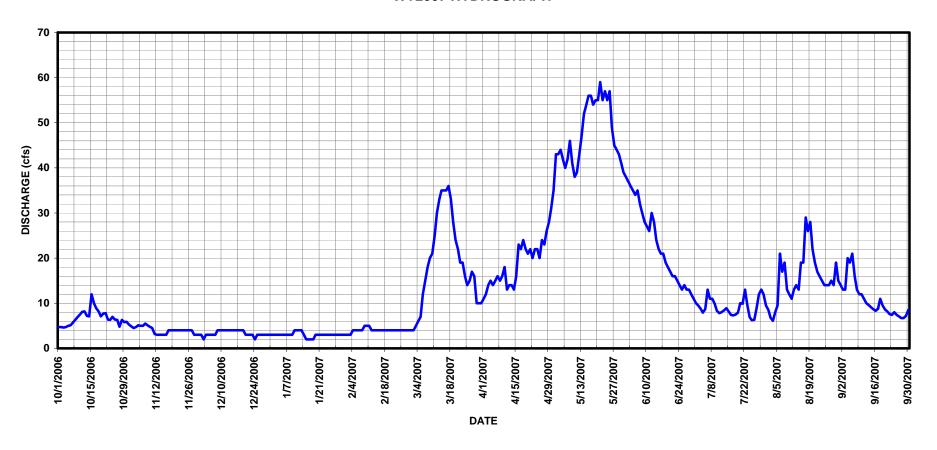
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- CARLAGCO15 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	CAN VALUE	S					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	4.9	3.0	3.0	3.0	4.0	11	35	38	10	8.5	14
2	4.7	4.5	2.0	3.0	3.0	4.0	12	43	37	9.5	6.8	13
3	4.6	4.7	3.0	3.0	3.0	5.0	14	43	36	8.8	6.1	13
4	4.7	5.1	3.0	3.0	4.0	6.0	15	44	35	7.9	8.1	20
5	5.0	5.0	3.0	3.0	4.0	7.0	14	42	34	8.7	9.5	19
6	5.1	5.0	3.0	3.0	4.0	12	15	40	35	13	21	21
7	5.7	5.5	3.0	3.0	4.0	15	16	42	32	11	17	16
8	6.3	5.1	4.0	3.0	4.0	18	15	46	30	1,1	19	13
9	6.9	4.8	4.0	3.0	5.0	20	16	41	28	9.9	13	12
10	7.5	4.5	4.0	4.0	5.0	21	18	38	27	8.3	12	12
11	8.1	3.2	4.0	4.0	5.0	25	13	39	26	7.8	11	11
12	8.2	3.0	4.0	4.0	4.0	30	14	43	30	8.0	13	10
13	7.2	3.0	4.0	4.0	4.0	33	14	47	28	8.4	14	9.6
14	7.1	3.0	4.0	3.0	4.0	35	13	52	24	8.9	13	9.1
15	12	3.0	4.0	2.0	4.0	35	16	54	22	8.2	19	8.7
16	10	3.0	4.0		4.0	35	23	56	21	7.4	19	8.3
17	8.9	4.0	4.0	2.0	4.0	36	22	56	21	7.3	29	8.8
18	8.2	4.0	4.0	2.0	4.0	33	24	54	19	7.5	26	11
19	7.1	4.0	4.0		4.0	28	22	55	18	7.9	28	9.5
20	7.7	4.0	3.0		4.0	24	21	55	17	10	22	8.6
21	7.8	4.0	3.0	3.0	4.0	22	22	59	16	9.9	19	8.2
22	6.4	4.0	3.0		4.0	19	20	55	16	13	17	7.6
23	6.3	4.0	3.0	3.0	4.0	19	22	57	15	9.7	16	7.4
24	7.0	4.0	2.0	3.0	4.0	16	22	55	14	6.9	15	8.0
25	6.4	4.0	3.0		4.0	14	20	57	13	6.2	14	7.4
26	6.3	4.0	3.0		4.0	15	24	49	14	6.3	14	7.1
27	4.8	4.0	3.0	3.0	4.0	17	23	45	13	9.0	14	6.7
28	6.3	3.0	3.0		4.0	16	26	44	13	12	15	6.7
29	5.8	3.0	3.0	3.0		10	28	43	12	13	14	7.2
30	5.9	3.0	3.0	3.0		10	31	41	11	12	19	8.5
31	5.3		3.0	3.0		10		39		9.5	15	
TOTAL	208.0	120.3	103.0	93.0	112.0	594.0	566	1469	695	287.0	487.0	322.4
MEAN	6.71	4.01	3.32	3.00	4.00	19.2	18.9	47.4	23.2	9.26	15.7	10.7
AC-FT	413	239	204	184	222	1180	1120	2910	1380	569	966	639
MAX	12	5.5	4.0	4.0	5.0	36	31	59	38	13	29	21
MIN	4.6	3.0	2.0	2.0	3.0	4.0	11	35	11	6.2	6.1	6.7
CAL YR	2006	TOTAL	1954.6	MEAN	5.36 MAX	2			AC-FT	3880		
WTR YR	2007	TOTAL	5056.7	MEAN	13.9 MAX	5	9 MIN	2	AC-FT	10030		

MAX DISCH: 84.2 CFS AT 19:15 ON Aug. 17, 2007 GH 2.86 FT. SHIFT 0.05 FT. MAX GH: 2.86 FT. AT 19:15 ON Aug. 17, 2007

# 08230500 CARNERO CREEK NEAR LA GARITA CO WY2007 HYDROGRAPH



# CLOSED BASIN IN SAN LUIS VALLEY,

#### 08231000 LA GARITA CREEK NEAR LA GARITA, CO

LOCATION.--Lat 37°48'48", long 106°19'05", in NW4SE4 sec. 9, T.41 N., R.6 E., Saguache County, Hydrologic Unit 13010004, on right bank 3.75 mi. downstream from Little La Garita Creek and 4.5 mi. southwest of La Garita, Co.

DRAINAGE AREA AND PERIOD OF RECORD.--61 mi². Non-recording station Apr. 01, 1919-June 23, 1927. Recording station from June 1927-Oct. 1998, at which time a Data Logger was installed. April 1999 satellite telemetry system installed. Station at various sites all within ¼ mile of present site.

GAGE.--Primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a 4 ft. metal pipe shelter and well. A graphic water-stage recorder is operated as a data backup. Altitude of gage is 8,030 ft from topographic map.

REMARKS.--Record is complete and reliable, except for the following periods: Dec. 1-20, 2006, when the well was frozen; and Dec. 21, 2006 to March 16, 2007, when the station was closed for the winter. Stage-discharge relation was affected by ice Nov. 11-30, 2006, and Mar. 30, 2007. Record is good, except for periods of no gage-height and ice-affected record, which should be considered poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- LAGLAGCO12 USED FROM 01-OCT-2006 TO 30-SEP-2007

DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP  1 6.2 8.9 4.0 2.0 5.0 4.0 11 69 63 18 13 13  2 6.2 8.4 4.0 2.0 6.0 4.0 11 69 63 15 10 12  4 6.1 9.5 4.0 2.0 7.0 5.0 17 61 61 61 15 13 14  5 6.2 8.9 6.0 2.0 7.0 5.0 17 61 61 61 15 13 14  5 6.2 8.9 6.0 2.0 7.0 5.0 17 61 61 61 15 13 14  6 6.4 9.6 6.0 2.0 7.0 8.0 21 43 63 27 27 18  8 16 9.2 6.0 2.0 7.0 10 23 43 54 21 19 12  8 16 9.2 6.0 2.0 7.0 10 23 43 54 21 19 12  8 16 9.2 6.0 2.0 7.0 12 20 45 49 19 24 11  9 16 8.8 5.0 3.0 7.0 12 20 45 49 19 24 11  10 16 7.0 6.0 3.0 7.0 12 20 50 46 14 15 9.4  11 16 4.8 6.0 3.0 7.0 12 20 50 46 14 15 9.4  11 16 4.8 6.0 3.0 7.0 15 13 67 58 15 20 9.0  12 12 5.4 6.0 3.0 6.0 15 13 67 58 15 20 9.0  13 11 5.0 7.0 3.0 6.0 15 13 67 58 15 20 9.0  13 11 5.0 7.0 3.0 6.0 16 14 66 49 16 20 8.4  14 11 5.0 7.0 3.0 6.0 16 14 46 66 49 16 20 8.4  14 11 5.0 7.0 3.0 6.0 16 14 75 41 14 35 7.7  16 20 5.2 6.0 2.0 6.0 2.0 6.0 20 20 73 38 16 20 8.4  14 11 5.0 7.0 3.0 6.0 16 14 46 66 49 16 20 8.4  15 18 4.4 7.0 3.0 6.0 20 20 74 75 41 14 35 7.7  16 20 5.2 6.0 2.0 6.0 2.0 14 75 41 14 35 7.7  16 20 5.2 6.0 2.0 6.0 2.0 14 75 41 14 35 7.7  17 15 6.0 6.0 2.0 6.0 20 20 85 40 13 28 7.7  18 13 6.8 6.0 2.0 6.0 2.0 14 75 41 14 35 7.7  18 13 6.8 6.0 6.0 2.0 6.0 22 22 74 36 15 22 22 88  34 14 26 8.7  20 15 6.0 4.0 4.0 6.0 18 25 83 30 18 20 8.8  21 15 6.0 4.0 4.0 6.0 18 25 83 30 18 20 8.8  22 12 6.6 2.0 4.0 6.0 18 25 83 30 18 20 8.8  23 12 6.6 2.0 4.0 6.0 18 25 83 30 18 20 8.8  24 13 6.4 1.0 4.0 5.0 14 24 71 25 11 15 7.7  26 11 6.0 2.0 5.0 5.0 5.0 16 27 58 21 13 14 7.2  24 13 6.4 1.0 4.0 5.0 5.0 14 24 71 25 11 15 7.7  26 11 6.0 2.0 5.0 5.0 5.0 16 27 58 21 13 14 7.2  24 13 6.4 1.0 4.0 5.0 5.0 12 22 74 88 81 15 20 8.8  EALTH OF TAIL 17.0 13.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2  EALTH OF TAIL 17.0 201.7 135.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2  EALTH OF TAIL 17.0 13.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2  EALTH OF TAIL 17.0 201.7 135.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2  EALTH OF TAIL 17.0 201.7 135.0 100.0 170.0 414.7 674 2057 12	MEAN VALUES												
2 6.2 8.4 4.0 2.0 6.0 4.0 14 78 63 16 11 13 3 6.0 10 4.0 2.0 6.0 4.0 15 60 63 15 10 12 4 6.1 9.5 4.0 2.0 7.0 5.0 17 61 61 61 15 13 14 5 6.2 8.9 5.0 2.0 7.0 5.0 18 52 63 16 18 13 6 6.4 9.6 6.0 2.0 7.0 8.0 21 43 63 27 27 18 7 17 9.8 6.0 2.0 7.0 11 20 45 49 19 24 11 9 16 8.8 5.0 3.0 7.0 11 20 45 49 19 24 11 9 16 8.8 5.0 3.0 7.0 12 17 49 47 16 16 16 9.5 10 16 7.0 6.0 3.0 7.0 12 17 49 47 16 16 16 9.5 11 16 4.8 6.0 3.0 7.0 13 14 55 45 13 16 9.0 12 12 5.4 6.0 3.0 6.0 15 13 67 58 15 20 9.0 13 11 5.0 7.0 3.0 6.0 15 13 67 58 15 20 9.0 13 11 5.0 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 18 4.4 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 18 4.4 7.0 3.0 6.0 20 20 85 40 13 28 7.7 17 15 6.0 6.0 6.0 2.0 6.0 20 20 85 40 13 28 7.7 17 15 6.0 6.0 6.0 2.0 6.0 20 20 20 85 40 13 28 7.7 18 13 6.8 6.0 2.0 6.0 2.0 6.0 21 22 88 34 14 26 8.7 20 15 6.0 6.0 3.0 6.0 19 25 83 30 18 20 22 22 8.0 21 15 6.2 3.0 4.0 6.0 21 22 22 88 34 14 26 8.7 22 12 6.4 5.0 3.0 6.0 18 21 22 74 36 15 24 11 19 12 6.4 5.0 3.0 6.0 21 22 22 88 34 14 26 8.7 22 12 6.6 2.0 4.0 6.0 21 22 22 88 34 14 26 8.7 25 12 6.6 2.0 4.0 6.0 18 25 77 28 15 24 11 19 12 6.4 5.0 3.0 6.0 19 25 83 30 18 20 8.0 21 15 6.2 3.0 4.0 6.0 18 25 77 28 15 77 22 22 8.0 21 15 6.2 3.0 4.0 6.0 18 25 77 28 15 77 22 88.0 22 12 6.6 2.0 4.0 6.0 18 25 77 28 15 77 22 88.0 23 12 6.6 2.0 4.0 6.0 18 25 77 28 15 77 7.2 26 11 6.0 2.0 5.0 5.0 12 20 77 25 11 14 7.7 27 11 5.4 6.0 3.0 5.0 5.0 12 20 77 25 11 14 7.7 29 12 6.4 2.0 4.0 6.0 18 25 77 28 15 77 22 88.0 21 15 6.2 3.0 4.0 6.0 18 25 77 28 15 77 22 88.0 22 12 6.6 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 1.0 4.0 5.0 19 25 83 30 18 20 8.0 25 12 6.6 2.0 4.0 6.0 18 25 77 28 15 17 7.2 27 11 5.4 3.0 3.0 5.0 5.0 12 20 77 25 11 14 7.7 30 11 4.0 2.0 5.0 5.0 5.0 12 20 77 25 11 14 7.7 31 15 6.7 44 35 3.0 5.0 5.0 16 27 58 21 13 3 14 6.9 31 9.9 2.0 5.0 5.0 9.0 59 63 19 21 13 14 18.4 9.3 31 9.9 2.0 5.0 5.0 5.0 16 27 59 88 63 27 35 18 MMN 1.0 8C-FT 6310	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
3 6.0 10 4.0 2.0 6.0 4.0 15 60 63 15 10 12 4 6.1 9.5 4.0 2.0 7.0 5.0 17 61 61 61 15 13 14 5 6.2 8.9 5.0 2.0 7.0 5.0 18 52 63 16 18 13 6 6.4 9.6 6.0 2.0 7.0 8.0 21 43 63 27 27 18 7 17 9.8 6.0 2.0 7.0 10 23 43 54 21 19 12 8 16 8.8 5.0 3.0 7.0 11 20 45 49 19 24 11 9 12 17 19 16 8.8 5.0 3.0 7.0 12 17 49 47 16 16 9.5 10 16 7.0 6.0 3.0 7.0 12 17 49 47 16 16 9.5 10 16 7.0 6.0 3.0 7.0 12 17 49 47 16 16 20 9.5 11 16 4.8 6.0 3.0 7.0 12 20 50 46 14 15 9.4 11 16 4.8 6.0 3.0 7.0 12 17 49 47 16 16 20 9.0 12 12 12 5.4 6.0 3.0 6.0 15 13 67 58 15 20 9.0 13 11 5.0 7.0 3.0 6.0 15 13 67 58 15 20 9.0 13 11 5.0 7.0 3.0 6.0 16 14 66 49 16 20 8.4 14 11 5.0 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 16 4.4 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 16 20 5.2 6.0 2.0 6.0 20 14 75 41 14 35 7.7 16 20 5.2 6.0 2.0 6.0 20 14 75 41 14 35 7.7 16 20 5.2 6.0 2.0 6.0 20 19 73 38 16 25 8.7 17 18 13 6.8 6.0 2.0 6.0 2.0 6.0 20 20 85 40 13 28 7.7 17 15 6.0 6.0 2.0 6.0 20 20 85 40 13 28 7.7 18 13 6.8 6.0 2.0 6.0 2.0 6.0 22 22 88 34 14 26 8.7 7 18 13 6.8 6.0 2.0 6.0 2.0 6.0 22 22 88 34 14 26 8.7 7 20 15 6.0 4.0 4.0 4.0 6.0 21 22 84 32 22 22 8.0 21 15 6.2 6.0 2.0 4.0 6.0 18 25 83 30 18 20 8.0 21 15 6.2 6.0 2.0 4.0 6.0 18 25 83 30 18 20 8.0 21 15 6.2 6.0 2.0 4.0 6.0 18 25 83 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 18 25 83 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 18 25 83 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 18 25 83 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 18 25 83 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 18 25 83 30 18 22 13 3 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 14 24 71 25 12 16 8.7 7 25 12 6.4 2.0 4.0 6.0 18 25 77 28 15 17 7.2 27 11 5.4 3.0 5.0 5.0 5.0 5.0 14 24 71 25 12 16 8.7 7 25 12 6.7 8 47 7 25 11 15 7.7 25 12 6.4 2.0 4.0 6.0 18 25 77 28 15 17 7.2 27 11 5.4 3.0 5.0 5.0 5.0 5.0 14 24 71 25 12 16 8.7 7 25 12 16 8.7 7 7 25 11 15 7.7 25 12 6.4 4.0 3.0 5.0 5.0 5.0 14 24 71 25 12 5 12 6.4 4.0 3.0 5.0 5.0 5.0 14 24 71 25 12 5 14 6.7 7 33 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 5.0 14 24 71 25 12 5 14 6.7 7 33 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 5.0 14 25 7 58 21 13 14 6.9 9 29 12 4.0 3.0 5.0 5.0 5.0 5	1	6.2	8.9	4.0	2.0	5.0	4.0	11	69	63	18	13	13
4 6.1 9.5 4.0 2.0 7.0 5.0 17 61 61 61 15 13 14 5 6.2 8.9 5.0 2.0 7.0 5.0 18 52 63 16 18 13 6 6.4 9.6 6.0 2.0 7.0 8.0 21 43 63 27 27 18 7 17 9.8 6.0 2.0 7.0 10 23 43 54 21 19 12 8 16 9.2 6.0 2.0 7.0 11 20 45 49 19 24 11 9 12 6 6.0 16 7.0 6.0 3.0 7.0 12 17 49 47 16 16 6 9.5 10 16 7.0 6.0 3.0 7.0 12 27 49 47 16 16 9.5 11 16 4.8 6.0 3.0 7.0 12 17 49 47 16 16 9.5 11 16 4.8 6.0 3.0 7.0 13 14 55 45 13 16 9.0 12 12 12 5.4 6.0 3.0 6.0 15 13 67 58 15 20 9.0 13 11 5.0 7.0 3.0 6.0 16 14 66 49 16 20 8.4 14 11 5.0 7.0 3.0 6.0 16 14 66 49 16 20 8.4 14 11 5.0 7.0 3.0 6.0 16 14 66 49 16 20 8.4 14 11 5.0 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 18 4.4 7.0 3.0 6.0 20 14 75 41 14 35 7.7 16 20 5.2 6.0 2.0 6.0 2.0 6.0 20 14 75 41 14 35 7.7 16 20 5.2 6.0 2.0 6.0 2.0 6.0 20 14 75 41 14 35 7.7 16 20 5.2 6.0 2.0 6.0 2.0 6.0 20 19 73 38 16 25 8.7 18 13 6.8 6.0 2.0 6.0 20 19 73 38 16 25 8.7 18 13 6.8 6.0 2.0 6.0 22 22 88 34 14 26 8.7 20 15 6.0 4.0 4.0 6.0 22 22 28 84 32 22 22 28 8.0 22 12 6.4 5.0 3.0 6.0 18 22 22 88 34 14 26 8.7 20 15 6.0 4.0 4.0 6.0 18 21 82 84 32 22 22 22 8.0 22 12 6.6 2.0 4.0 6.0 18 21 82 84 32 22 22 28 8.0 22 12 6.6 2.0 4.0 6.0 18 25 77 25 11 15 7.7 25 12 6.0 4.0 4.0 6.0 18 25 77 25 11 15 7.7 25 12 6.0 4.0 4.0 6.0 18 25 77 25 11 15 7.7 25 12 6.4 20 4.0 5.0 14 23 67 22 11 14 7.2 27 11 5.4 3.0 5.0 5.0 5.0 14 23 67 22 11 14 7.2 27 11 5.4 3.0 5.0 5.0 5.0 14 23 67 22 11 14 7.7 25 11 15 6.7 7.7 28 15 17 7.2 27 11 5.4 3.0 5.0 5.0 5.0 14 23 67 22 11 14 7.7 25 11 15 6.7 7.7 25 11 5.4 3.0 5.0 5.0 5.0 14 23 67 22 11 14 7.7 25 11 15 7.7 7.9 26 11 6.0 2.0 5.0 5.0 5.0 14 23 67 22 11 14 7.7 25 11 15 7.7 7.9 18 14 14 14 15 15 14 14 15 15 14 14 15 15 14 14 14 15 15 14 14 14 15 15 14 14 14 15 15 14 14 14 15 15 14 14 14 15 15 14 14 14 15 15 14 14 14 15 15 14 14 14 15 15 14 14 14 14 14 15 15 14 14 14 14 15 15 14 14 14 14 14 15 15 14 14 14 14 14 14 14 14 14 14 14 14 14	2	6.2	8.4	4.0	2.0	6.0	4.0	14	78	63	16	11	13
5 6.2 8.9 5.0 2.0 7.0 5.0 18 52 63 16 18 13 6 6 6.4 9.6 6.0 2.0 7.0 8.0 21 43 63 27 27 18 7 17 9.8 6.0 2.0 7.0 10 23 43 54 21 19 12 8 16 6 9.2 6.0 2.0 7.0 11 20 45 49 19 24 11 9 12 10 16 8.8 5.0 3.0 7.0 12 17 49 47 16 16 9.5 10 16 6 7.0 6.0 3.0 7.0 12 17 49 47 16 16 9.5 10 16 6 7.0 6.0 3.0 7.0 12 17 49 47 16 16 9.5 11 16 4.8 6.0 3.0 7.0 12 17 49 47 16 16 9.5 13 16 9.0 12 12 12 5.4 6.0 3.0 7.0 12 20 50 46 14 15 9.4 11 16 4.8 6.0 3.0 7.0 12 17 49 47 16 16 16 9.5 13 16 9.0 12 12 12 5.4 6.0 3.0 6.0 15 13 67 58 15 20 9.0 13 11 5.0 7.0 3.0 6.0 16 14 66 49 16 20 8.4 14 11 5.0 7.0 3.0 6.0 16 14 66 49 16 20 8.4 14 11 5.0 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 18 4.4 7.0 3.0 6.0 20 20 85 40 13 28 7.7 17 17 15 6.0 6.0 6.0 2.0 6.0 20 20 85 40 13 28 7.7 17 17 15 6.0 6.0 6.0 2.0 6.0 20 20 85 40 13 28 7.7 18 13 6.8 6.0 2.0 6.0 2.0 6.0 21 22 74 36 15 24 11 19 19 12 6.4 5.0 3.0 6.0 21 22 74 36 15 24 11 19 19 12 6.4 5.0 3.0 6.0 21 22 88 34 14 26 8.7 20 15 6.0 4.0 4.0 6.0 21 22 88 34 14 26 8.7 20 15 6.0 4.0 4.0 6.0 21 22 88 34 14 26 8.7 22 12 6.6 2.0 4.0 6.0 18 21 82 88 34 14 26 8.7 22 12 6.6 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 1.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 1.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 2.0 4.0 6.0 5.0 18 25 77 28 15 17 7.2 24 13 6.4 2.0 4.0 6.0 18 25 77 88 22 16 8.0 29 12 14 4.0 3.0 5.0 5.0 5.0 14 24 71 25 12 16 8.7 7.2 24 13 6.4 2.0 4.0 6.0 18 25 77 88 66 21 25 14 11 47 7.2 27 11 5.4 3.0 5.0 5.0 5.0 14 24 71 25 12 16 8.7 7.2 24 13 6.4 2.0 4.0 5.0 5.0 14 22 77 58 21 15 77 25 11 15 77 26 11 6.0 2.0 5.0 5.0 5.0 14 23 67 25 12 6.4 4.0 3.0 5.0 5.0 5.0 14 24 71 25 12 16 8.7 7.2 24 13 6.4 2.0 4.0 5.0 5.0 14 22 77 58 21 15 5.7 7.2 25 11 15 7.7 7.2 26 11 6.0 2.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5	3	6.0	10	4.0	2.0	6.0	4.0	15	60	63	15	10	12
6 6.4 9.6 6.0 2.0 7.0 8.0 21 43 63 27 27 18 7 17 9.8 6.0 2.0 7.0 10 23 43 54 21 19 12 8 16 9.2 6.0 2.0 7.0 11 20 45 49 19 24 11 9 16 8.8 5.0 3.0 7.0 12 17 49 47 16 16 6 9.5 10 16 7.0 6.0 3.0 7.0 12 17 49 47 16 16 9.5 11 16 4.8 6.0 3.0 7.0 13 14 55 45 13 16 9.0 12 12 5.4 6.0 3.0 6.0 15 13 67 58 15 20 9.0 13 11 5.0 7.0 3.0 6.0 16 14 66 49 16 20 8.4 14 11 5.0 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 18 4.4 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 18 4.4 7.0 3.0 6.0 20 14 75 41 14 35 7.7 16 20 5.2 6.0 2.0 6.0 20 85 40 13 28 7.7 17 15 6.0 6.0 2.0 6.0 20 20 85 40 13 28 7.7 18 13 6.8 6.0 2.0 6.0 20 20 85 40 13 28 7.7 18 13 6.8 6.0 2.0 6.0 21 22 28 8 34 14 26 8.7 20 15 6.0 4.0 4.0 4.0 6.0 21 22 28 84 32 22 22 8.0 21 15 6.2 3.0 4.0 6.0 21 22 28 84 32 22 22 28 8.0 22 12 6.6 2.0 4.0 6.0 21 22 28 84 32 22 22 28 8.0 22 12 6.6 2.0 4.0 6.0 18 21 82 84 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 18 21 82 84 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 18 21 82 84 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 18 21 82 84 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 18 21 82 84 32 22 22 28 8.0 24 13 6.4 1.0 4.0 5.0 18 21 82 84 30 19 18 7.4 25 12 6.6 2.0 4.0 6.0 18 21 82 84 30 19 18 7.4 25 12 6.6 2.0 4.0 6.0 18 21 82 84 30 19 18 7.4 26 11 6.0 2.0 5.0 5.0 5.0 14 24 71 25 12 16 8.7 27 11 5.4 3.0 5.0 5.0 5.0 14 24 71 25 12 16 8.7 28 13 6.4 1.0 4.0 5.0 14 24 71 25 12 16 8.7 29 12 4.0 3.0 5.0 5.0 5.0 14 22 77 58 21 13 14 6.9 28 13 5.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 28 13 5.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 82 11 13 14 6.9 28 13 5.0 3.0 5.0 5.0 5.0 16 27 58 82 11 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 82 11 13 14 6.9 28 13 5.0 3.0 5.0 5.0 5.0 16 27 58 82 11 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 82 11 13 14 6.9 31 9.9 2.0 5.0 5.0 10 61 15 13  TOTAL 377.0 201.7 135.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2  CAL YR 2006 TOTAL 3179.6 MEAN 8.71 MAX 48 MIN 1.0 AC-FT 6310	4	6.1	9.5	4.0	2.0	7.0	5.0	17	61	61	15	13	14
7   17   9.8   6.0   2.0   7.0   10   23   43   54   21   19   12   8   16   9.2   6.0   2.0   7.0   11   20   45   49   19   24   11   9   16   8.8   5.0   3.0   7.0   12   17   49   47   16   16   9.5   10   16   7.0   6.0   3.0   7.0   12   20   50   46   14   15   9.4   11   16   4.8   6.0   3.0   7.0   13   14   55   45   13   16   9.0   12   12   5.4   6.0   3.0   6.0   15   13   67   58   15   20   9.0   13   11   5.0   7.0   3.0   6.0   16   14   66   49   16   20   8.4   14   11   5.0   7.0   3.0   6.0   18   12   78   44   16   18   8.1   15   18   4.4   7.0   3.0   6.0   20   14   75   41   14   35   7.7   16   20   5.2   6.0   2.0   6.0   20   20   85   40   13   28   7.7   17   15   6.0   6.0   2.0   6.0   20   20   85   40   13   28   7.7   17   15   6.0   6.0   2.0   6.0   20   22   22   88   34   14   26   8.7   18   13   6.8   6.0   2.0   6.0   22   22   22   88   34   14   26   8.7   20   21   22   12   6.6   2.0   4.0   6.0   21   22   74   36   15   24   11   19   12   6.4   5.0   3.0   6.0   21   22   74   36   15   24   11   19   12   6.4   5.0   3.0   6.0   21   22   22   88   34   14   26   8.7   20   15   6.0   6.0   4.0   4.0   6.0   21   22   84   32   22   22   22   8.0   21   15   6.2   3.0   4.0   6.0   18   21   81   30   19   18   7.4   23   12   6.6   2.0   4.0   6.0   18   25   77   28   15   77   28   15   77   24   13   6.4   1.0   4.0   5.0   14   24   71   25   12   16   8.7   72   24   13   6.4   1.0   4.0   5.0   5.0   14   24   71   25   12   16   8.7   72   24   13   6.4   1.0   4.0   5.0   5.0   14   24   71   25   12   16   8.7   72   24   13   6.4   1.0   4.0   5.0   5.0   14   24   71   25   12   16   8.7   72   25   12   16   8.7   72   25   12   16   8.7   72   25   12   16   8.7   73   28   13   14   4.0   20   5.0   5.0   5.0   16   27   58   21   13   14   4.0   9.6   28   13   5.0   3.0   5.0   5.0   5.0   16   27   58   21   13   14   4.0   9.6   28   28   28   28   28   28   28   2	5	6.2	8.9	5.0	2.0	7.0	5.0	18	52	63	16	18	13
8 16 9.2 6.0 2.0 7.0 11 20 45 49 19 19 24 11 9 16 8.8 5.0 3.0 7.0 12 17 49 47 16 16 9.5 10 16 7.0 6.0 3.0 7.0 12 20 50 46 14 15 9.4 11 16 4.8 6.0 3.0 7.0 13 14 55 45 13 16 9.0 12 12 5.4 6.0 3.0 6.0 15 13 67 58 15 20 9.0 13 11 5.0 7.0 3.0 6.0 16 14 75 41 14 35 7.7 16 18 4.4 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 18 4.4 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 18 4.4 7.0 3.0 6.0 20 14 75 41 14 35 7.7 16 20 5.2 6.0 2.0 6.0 20 19 73 38 16 25 8.7 17 15 6.0 6.0 6.0 2.0 6.0 20 19 73 38 16 25 8.7 18 19 12 6.4 5.0 3.0 4.0 6.0 21 22 28 88 34 14 26 8.7 19 19 12 6.4 5.0 3.0 4.0 6.0 21 22 88 34 14 26 8.7 20 15 6.0 4.0 4.0 6.0 21 22 88 34 14 26 8.7 22 22 8.0 21 15 6.2 3.0 4.0 6.0 19 25 83 30 18 20 8.0 21 15 6.2 3.0 4.0 6.0 19 25 83 30 18 20 8.0 21 15 6.0 2.0 4.0 6.0 19 25 83 30 18 20 8.0 21 15 6.0 2.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 1.0 4.0 5.0 14 23 67 25 11 15 7.7 26 11 6.0 2.0 5.0 5.0 5.0 14 23 77 25 11 15 7.7 26 11 6.0 2.0 5.0 5.0 5.0 14 23 77 58 21 13 14 6.9 28 13 5.0 3.0 5.0 5.0 5.0 14 23 77 58 21 13 14 6.9 28 13 5.0 3.0 5.0 5.0 5.0 14 23 77 58 21 13 14 6.9 28 13 5.0 3.0 5.0 5.0 5.0 16 44 75 82 11 15 14 7.2 27 11 5.4 3.0 5.0 5.0 5.0 16 44 76 4 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 76 4 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 76 4 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 76 4 2057 1232 507 569 288.2 88.2 88.2 88.2 88.2 88.2 88.2 88	6	6.4	9.6	6.0	2.0	7.0	8.0	21	43	63	27	27	18
9 16 8.8 5.0 3.0 7.0 12 17 49 47 16 16 16 9.5 10 16 7.0 6.0 3.0 7.0 12 20 50 46 14 15 9.4 11 16 4.8 6.0 3.0 7.0 13 14 55 45 13 16 9.0 12 12 5.4 6.0 3.0 6.0 15 13 67 58 15 20 9.0 13 11 5.0 7.0 3.0 6.0 16 14 66 49 16 20 8.4 14 11 5.0 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 18 4.4 7.0 3.0 6.0 20 14 75 41 14 35 7.7 16 20 5.2 6.0 2.0 6.0 20 20 85 40 13 28 7.7 17 15 6.0 6.0 2.0 6.0 20 19 73 38 16 25 8.7 18 13 6.8 6.0 2.0 6.0 20 19 73 38 16 25 8.7 18 13 6.8 6.0 2.0 6.0 22 22 88 34 14 26 8.7 20 15 6.0 4.0 4.0 6.0 22 22 88 34 14 26 8.7 21 15 6.2 3.0 4.0 6.0 21 22 84 32 22 22 8.0 21 15 6.2 3.0 4.0 6.0 18 21 83 30 18 20 8.0 21 15 6.2 3.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.4 24 13 6.4 1.0 4.0 5.0 18 21 81 30 19 18 7.4 25 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.7 26 11 6.0 2.0 5.0 5.0 5.0 14 24 71 25 12 16 8.7 27 24 13 6.4 1.0 4.0 5.0 14 24 71 25 12 16 8.7 28 11 5.4 2.0 15 6.4 2.0 4.0 6.0 18 21 82 18 13 10 19 18 7.7 29 11 5.4 3.0 5.0 5.0 5.0 14 24 71 25 12 16 8.7 29 12 6.4 2.0 5.0 5.0 5.0 14 24 71 25 12 16 8.7 20 15 6.9 2.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 24 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 20 12 5 6.7 4.35 3.23 6.07 7.7 58 66 21 22 5 14 7.7 30 11 4.0 2.0 5.0 9.0 59 63 19 21 14 9.3 31 9.9 2.0 5.0 9.0 59 63 19 21 14 9.3 31 9.9 2.0 5.0 9.0 59 63 19 21 14 9.3 31 9.9 2.0 5.0 9.0 59 88 63 27 35 18 31 9.9 2.0 5.0 9.0 59 88 63 27 35 18 31 9.9 2.0 5.0 9.0 59 88 63 27 35 18 31 9.9 2.0 5.0 9.0 59 88 63 27 35 18 31 0.0 6.0 50 50 50 50 50 50 50 50 50 50 50 50 50	7	17	9.8	6.0	2.0	7.0	10	23	43	54		19	
10				6.0								24	
11 16 4.8 6.0 3.0 7.0 13 14 55 45 13 16 9.0  12 12 5.4 6.0 3.0 6.0 15 13 67 58 15 20 9.0  13 11 5.0 7.0 3.0 6.0 16 14 66 49 16 20 8.4  14 11 5.0 7.0 3.0 6.0 18 12 78 44 16 18 8.1  15 18 4.4 7.0 3.0 6.0 20 14 75 41 14 35 7.7  16 20 5.2 6.0 2.0 6.0 20 20 85 40 13 28 7.7  17 15 6.0 6.0 2.0 6.0 20 19 73 38 16 25 8.7  18 13 6.8 6.0 2.0 6.0 20 19 73 38 16 25 8.7  18 13 6.8 6.0 2.0 6.0 22 22 88 34 14 26 8.7  20 15 6.0 4.0 4.0 6.0 21 22 74 36 15 24 11  19 12 6.4 5.0 3.0 6.0 22 22 28 88 34 14 26 8.7  20 15 6.2 3.0 4.0 6.0 21 22 84 32 22 22 8.0  21 15 6.2 3.0 4.0 6.0 19 25 83 30 18 20 8.0  22 12 6.6 2.0 4.0 6.0 19 25 83 30 19 18 7.4  23 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.4  24 13 6.4 1.0 4.0 5.0 18 25 77 28 15 17 7.2  24 13 6.4 1.0 4.0 5.0 14 24 71 25 12 16 8.7  25 12 6.4 2.0 4.0 5.0 14 24 71 25 12 16 8.7  26 11 6.0 2.0 5.0 5.0 14 23 77 25 11 15 7.7  26 27 11 5.4 3.0 5.0 5.0 5.0 14 23 67 58 21 13 14 6.9  28 13 5.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9  29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9  29 12 4.0 3.0 5.0 5.0 5.0 16 87 58 21 13 14 6.9  29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9  29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9  29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9  20 10 7.0 5.0 7.0 22 59 88 63 27 35 18  MIN 6.0 4.0 1.0 2.0 5.0 7.0 22 59 88 63 27 35 18  MIN 6.0 4.0 1.0 2.0 5.0 7.0 22 59 88 63 27 35 18  MIN 6.0 4.0 1.0 2.0 5.0 7.0 22 59 88 63 27 35 18  MIN 6.0 4.0 1.0 2.0 5.0 7.0 22 59 88 63 27 35 18  MIN 6.0 4.0 1.0 2.0 5.0 7.0 22 59 88 63 27 35 18  MIN 6.0 4.0 1.0 2.0 5.0 7.0 22 59 88 63 27 35 18													
12 12 5.4 6.0 3.0 6.0 15 13 67 58 15 20 9.0 13 11 15.0 7.0 3.0 6.0 16 14 66 49 16 20 8.4 14 11 5.0 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 15 18 4.4 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 15 18 4.4 7.0 3.0 6.0 20 14 75 41 14 35 7.7 16 20 5.2 6.0 2.0 6.0 20 19 73 38 16 25 8.7 17 15 6.0 6.0 6.0 2.0 6.0 20 19 73 38 16 25 8.7 18 18 13 6.8 6.0 2.0 6.0 20 19 73 38 16 25 8.7 18 19 12 6.4 5.0 3.0 6.0 22 22 88 34 14 26 8.7 20 15 6.0 4.0 4.0 4.0 6.0 21 22 74 36 15 24 11 19 12 6.4 5.0 3.0 6.0 22 22 88 34 32 22 22 22 8.0 21 15 6.0 4.0 4.0 6.0 21 22 84 32 22 22 22 8.0 21 15 6.2 3.0 4.0 6.0 19 25 83 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 19 25 83 30 18 20 8.0 22 12 6.6 6 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 1.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 1.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 6.4 2.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 6.1 8.7 25 12 6.4 2.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 6.1 8.7 25 12 6.4 2.0 4.0 5.0 14 23 67 22 11 14 7.2 27 11 5.4 3.0 5.0 5.0 5.0 14 24 71 25 12 16 8.7 25 12 16 8.7 25 12 16 8.7 26 11 6.0 2.0 5.0 5.0 5.0 14 23 67 22 11 14 7.2 27 11 5.4 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 28 13 5.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 33 19 9.9 2.0 5.0 7.7 58 66 21 25 14 7.7 33 19.9 2.0 5.0 10 61 15 13 15 13 15 13 15 13 15 13 15 13 15 13 15 13 15 13 15 13 15 13 15 13 10 10 10 11 10 11 10 6.9 10 11 10 11 11 10 6.9 10 11 10 11 10 6.9 10 11 10 11 10 6.9 10 11 10 11 10 6.9 10 11 10 11 10 6.9 10 11 10 11 10 6.9 10 11 10 11 10 6.9 10 11 10 11 10 6.9 10 11 10 11 10 6.9 10 11 10 11 10 6.9 10 11 10 11 10 6.9 10 11 10 11 10 6.9 10 11 10 11 10 10 11 10 10 11 10 10 11 10 10													
13 11 5.0 7.0 3.0 6.0 16 14 66 49 16 20 8.4 114 11 5.0 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 18 4.4 7.0 3.0 6.0 20 14 75 41 14 35 7.7 16 20 5.2 6.0 2.0 6.0 20 20 85 40 13 28 7.7 17 15 6.0 6.0 6.0 2.0 6.0 20 19 73 38 16 25 8.7 18 13 6.8 6.0 2.0 6.0 21 22 74 36 15 24 11 19 12 6.4 5.0 3.0 6.0 22 22 88 34 14 26 8.7 20 15 6.0 4.0 4.0 6.0 19 25 83 30 18 20 22 22 8.0 21 15 6.2 3.0 4.0 6.0 19 25 83 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 19 25 83 30 18 20 8.0 22 12 6.6 6 2.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 1.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 6.4 2.0 4.0 5.0 14 24 71 25 12 16 8.7 26 11 6.0 2.0 5.0 5.0 14 24 71 25 12 16 8.7 27 28 13 6.4 2.0 4.0 5.0 14 24 71 25 12 16 8.7 28 11 5.4 3.0 5.0 5.0 14 23 67 22 11 14 7.2 29 11 5.4 3.0 5.0 5.0 14 23 67 22 11 14 7.2 27 11 5.4 3.0 5.0 5.0 5.0 14 23 67 22 11 14 6.9 28 13 5.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6													
14 11 5.0 7.0 3.0 6.0 18 12 78 44 16 18 8.1 15 18 4.4 7.0 3.0 6.0 20 14 75 41 14 35 7.7 16 20 5.2 6.0 2.0 6.0 20 20 85 40 13 28 7.7 17 15 6.0 6.0 6.0 2.0 6.0 20 19 73 38 16 25 8.7 18 18 13 6.8 6.0 2.0 6.0 22 22 88 34 14 26 8.7 19 12 6.4 5.0 3.0 6.0 22 22 88 34 14 26 8.7 20 15 6.2 3.0 4.0 6.0 21 22 74 36 15 24 11 20 15 6.2 3.0 4.0 6.0 21 22 84 32 22 22 8.0 21 15 6.2 3.0 4.0 6.0 19 25 83 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 1.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 6.6 2.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 16 8.7 25 12 6.4 2.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 16 8.7 25 12 6.1 16 6.0 2.0 5.0 5.0 14 23 67 22 11 15 6.0 2.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 16 8.7 25 12 6.4 2.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 16 8.7 25 12 6.4 2.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 16 8.7 25 12 16 8.7 25 12 16 8.7 25 12 16 8.7 25 12 16 8.7 31 15 7.7 26 11 6.0 2.0 5.0 5.0 5.0 14 23 67 22 11 13 14 6.9 28 13 5.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 9.3 31 9.9 2.0 5.0 9.0 59 63 19 21 14 9.3 31 9.9 2.0 5.0 9.0 59 63 19 21 14 9.3 31 9.9 2.0 5.0 9.0 59 63 19 21 14 9.3 31 9.9 2.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 6.9		12											
15													
16 20 5.2 6.0 2.0 6.0 20 19 73 38 16 25 8.7 17 17 15 6.0 6.0 2.0 6.0 20 19 73 38 16 25 8.7 18 13 6.8 6.0 2.0 6.0 21 22 74 36 15 24 11 19 12 6.4 5.0 3.0 6.0 22 22 28 88 34 14 26 8.7 20 15 6.0 4.0 4.0 6.0 21 22 74 84 32 22 22 8.0 21 15 6.2 3.0 4.0 6.0 19 25 83 30 18 20 8.0 22 11 15 6.2 3.0 4.0 6.0 19 25 83 30 18 20 8.0 22 12 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 1.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 6.4 10 4.0 5.0 14 24 71 25 12 16 8.7 25 12 6.4 2.0 4.0 5.0 14 23 67 22 11 15 7.7 26 11 6.0 2.0 5.0 5.0 14 23 67 22 11 15 7.7 26 11 6.0 2.0 5.0 5.0 14 23 67 22 11 15 7.7 26 11 6.0 2.0 5.0 5.0 16 27 58 21 11 15 7.7 26 11 6.0 2.0 5.0 5.0 16 27 58 21 11 14 7.2 27 11 5.4 3.0 5.0 5.0 5.0 16 27 58 21 11 14 7.2 28 13 5.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 7.7 33 19.9 2.0 5.0 5.0 7.7 58 66 21 25 14 7.7 33 19.9 2.0 5.0 5.0 10 61 15 13 TOTAL 377.0 201.7 135.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2 MEAN 12.2 6.72 4.35 3.23 6.07 13.4 22.5 66.4 41.1 16.4 18.4 9.61 AC-FT 748 400 268 198 337 823 1340 4080 2440 1010 1130 572 MAX 20 10 7.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 5.0 4.0 11 43 19 11 10 6.9													
17													
18													
19 12 6.4 5.0 3.0 6.0 22 22 88 34 14 26 8.7 20 15 6.0 4.0 4.0 6.0 21 22 84 32 22 22 8.0 21 15 6.2 3.0 4.0 6.0 19 25 83 30 18 20 8.0 22 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 1.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 16 8.7 25 12 6.4 2.0 4.0 5.0 12 20 77 25 11 15 7.7 26 11 6.0 2.0 5.0 5.0 14 23 67 22 11 14 7.2 27 11 5.4 3.0 5.0 5.0 5.0 14 23 67 22 11 14 7.2 27 11 5.4 3.0 5.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 16 27 58 66 21 25 14 7.7 30 11 4.0 2.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 9.3 31 9.9 2.0 5.0 5.0 9.0 59 63 19 21 14 9.3 31 9.9 2.0 5.0 5.0 10 0.0 170.0 414.7 674 20.57 1232 507 569 288.2 MEAN 12.2 6.72 4.35 3.23 6.07 13.4 22.5 66.4 41.1 16.4 18.4 9.61 AC-FT 748 400 268 198 337 823 1340 4080 2440 1010 1130 572 MAX 20 10 7.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 5.0 4.0 11 43 19 11 10 6.9													
20													
21													
22 12 6.6 2.0 4.0 6.0 18 21 81 30 19 18 7.4 23 12 6.6 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 1.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 6.4 2.0 4.0 5.0 14 24 71 25 12 16 8.7 26 11 6.0 2.0 5.0 5.0 12 20 77 25 11 15 7.7 26 11 6.0 2.0 5.0 5.0 14 23 67 22 11 14 7.2 27 11 5.4 3.0 5.0 5.0 16 27 58 21 13 14 6.9 28 13 5.0 3.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 5.0 5.0 5.0 16 44 58 22 16 14 7.7 30 11 4.0 2.0 5.0 5.0 5.0 5.9 63 19 21 14 9.3 31 9.9 2.0 5.0 5.0 5.0 5.0 5.9 63 19 21 14 9.3 31 9.9 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0													
23 12 6.6 2.0 4.0 6.0 18 25 77 28 15 17 7.2 24 13 6.4 1.0 4.0 5.0 14 24 71 25 12 16 8.7 25 12 6.4 2.0 4.0 5.0 12 20 77 25 11 15 7.7 26 11 6.0 2.0 5.0 5.0 14 23 67 22 11 14 7.2 27 11 5.4 3.0 5.0 5.0 16 27 58 21 13 14 6.9 28 13 5.0 3.0 5.0 5.0 16 27 58 21 13 14 6.9 29 12 4.0 3.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 7.7 58 66 21 25 14 7.7 30 11 4.0 2.0 5.0 9.0 59 63 19 21 14 9.3 31 9.9 2.0 5.0 10 61 15 13  TOTAL 377.0 201.7 135.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2 MEAN 12.2 6.72 4.35 3.23 6.07 13.4 22.5 66.4 41.1 16.4 18.4 9.61 AC-FT 748 400 268 198 337 823 1340 4080 2440 1010 1130 572 MAX 20 10 7.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 7.0 11 43 19 11 10 6.9													
24     13     6.4     1.0     4.0     5.0     14     24     71     25     12     16     8.7       25     12     6.4     2.0     4.0     5.0     12     20     77     25     11     15     7.7       26     11     6.0     2.0     5.0     5.0     14     23     67     22     11     14     7.2       27     11     5.4     3.0     5.0     5.0     16     27     58     21     13     14     6.9       28     13     5.0     3.0     5.0     5.0     16     44     58     22     16     14     6.9       29     12     4.0     3.0     5.0      7.7     58     66     21     25     14     7.7       30     11     4.0     2.0     5.0      9.0     59     63     19     21     14     9.3       31     9.9      2.0     5.0      10      61      15     13        TOTAL     377.0     201.7     135.0     100.0     170.0     414.7     674     2057     1232     50													
25													
26 11 6.0 2.0 5.0 5.0 14 23 67 22 11 14 7.2 27 11 5.4 3.0 5.0 5.0 16 27 58 21 13 14 6.9 28 13 5.0 3.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 7.7 58 66 21 25 14 7.7 30 11 4.0 2.0 5.0 9.0 59 63 19 21 14 9.3 31 9.9 2.0 5.0 10 61 15 13 TOTAL 377.0 201.7 135.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2 MEAN 12.2 6.72 4.35 3.23 6.07 13.4 22.5 66.4 41.1 16.4 18.4 9.61 AC-FT 748 400 268 198 337 823 1340 4080 2440 1010 1130 572 MAX 20 10 7.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 5.0 4.0 11 43 19 11 10 6.9 CAL YR 2006 TOTAL 3179.6 MEAN 8.71 MAX 48 MIN 1.0 AC-FT 6310													
27 11 5.4 3.0 5.0 5.0 16 27 58 21 13 14 6.9 28 13 5.0 3.0 5.0 5.0 16 44 58 22 16 14 6.9 29 12 4.0 3.0 5.0 7.7 58 66 21 25 14 7.7 30 11 4.0 2.0 5.0 9.0 59 63 19 21 14 9.3 31 9.9 2.0 5.0 10 61 15 13   TOTAL 377.0 201.7 135.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2 MEAN 12.2 6.72 4.35 3.23 6.07 13.4 22.5 66.4 41.1 16.4 18.4 9.61 AC-FT 748 400 268 198 337 823 1340 4080 2440 1010 1130 572 MAX 20 10 7.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 5.0 4.0 11 43 19 11 10 6.9   CAL YR 2006 TOTAL 3179.6 MEAN 8.71 MAX 48 MIN 1.0 AC-FT 6310													
28													
29 12 4.0 3.0 5.0 7.7 58 66 21 25 14 7.7 30 11 4.0 2.0 5.0 9.0 59 63 19 21 14 9.3 31 9.9 2.0 5.0 10 61 15 13   TOTAL 377.0 201.7 135.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2 MEAN 12.2 6.72 4.35 3.23 6.07 13.4 22.5 66.4 41.1 16.4 18.4 9.61 AC-FT 748 400 268 198 337 823 1340 4080 2440 1010 1130 572 MAX 20 10 7.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 4.0 11 43 19 11 10 6.9   CAL YR 2006 TOTAL 3179.6 MEAN 8.71 MAX 48 MIN 1.0 AC-FT 6310													
30 11 4.0 2.0 5.0 9.0 59 63 19 21 14 9.3 31 9.9 2.0 5.0 10 61 15 13   TOTAL 377.0 201.7 135.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2 MEAN 12.2 6.72 4.35 3.23 6.07 13.4 22.5 66.4 41.1 16.4 18.4 9.61 AC-FT 748 400 268 198 337 823 1340 4080 2440 1010 1130 572 MAX 20 10 7.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 4.0 11 43 19 11 10 6.9   CAL YR 2006 TOTAL 3179.6 MEAN 8.71 MAX 48 MIN 1.0 AC-FT 6310													
31 9.9 2.0 5.0 10 61 15 13  TOTAL 377.0 201.7 135.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2  MEAN 12.2 6.72 4.35 3.23 6.07 13.4 22.5 66.4 41.1 16.4 18.4 9.61  AC-FT 748 400 268 198 337 823 1340 4080 2440 1010 1130 572  MAX 20 10 7.0 5.0 7.0 22 59 88 63 27 35 18  MIN 6.0 4.0 1.0 2.0 5.0 4.0 11 43 19 11 10 6.9  CAL YR 2006 TOTAL 3179.6 MEAN 8.71 MAX 48 MIN 1.0 AC-FT 6310													
TOTAL 377.0 201.7 135.0 100.0 170.0 414.7 674 2057 1232 507 569 288.2 MEAN 12.2 6.72 4.35 3.23 6.07 13.4 22.5 66.4 41.1 16.4 18.4 9.61 AC-FT 748 400 268 198 337 823 1340 4080 2440 1010 1130 572 MAX 20 10 7.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 4.0 11 43 19 11 10 6.9 CAL YR 2006 TOTAL 3179.6 MEAN 8.71 MAX 48 MIN 1.0 AC-FT 6310													
MEAN 12.2 6.72 4.35 3.23 6.07 13.4 22.5 66.4 41.1 16.4 18.4 9.61 AC-FT 748 400 268 198 337 823 1340 4080 2440 1010 1130 572 MAX 20 10 7.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 4.0 11 43 19 11 10 6.9 CAL YR 2006 TOTAL 3179.6 MEAN 8.71 MAX 48 MIN 1.0 AC-FT 6310	21	9.9		2.0	5.0		10		0.1		13	13	
MEAN 12.2 6.72 4.35 3.23 6.07 13.4 22.5 66.4 41.1 16.4 18.4 9.61 AC-FT 748 400 268 198 337 823 1340 4080 2440 1010 1130 572 MAX 20 10 7.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 4.0 11 43 19 11 10 6.9 CAL YR 2006 TOTAL 3179.6 MEAN 8.71 MAX 48 MIN 1.0 AC-FT 6310	TOTAL	377.0	201.7	135.0	100.0	170.0	414.7	674	2057	1232	507	569	288.2
MAX 20 10 7.0 5.0 7.0 22 59 88 63 27 35 18 MIN 6.0 4.0 1.0 2.0 5.0 4.0 11 43 19 11 10 6.9 CAL YR 2006 TOTAL 3179.6 MEAN 8.71 MAX 48 MIN 1.0 AC-FT 6310	MEAN	12.2	6.72		3.23	6.07	13.4	22.5	66.4	41.1	16.4	18.4	
MIN 6.0 4.0 1.0 2.0 5.0 4.0 11 43 19 11 10 6.9  CAL YR 2006 TOTAL 3179.6 MEAN 8.71 MAX 48 MIN 1.0 AC-FT 6310	AC-FT	748	400	268	198	337	823	1340	4080	2440	1010	1130	572
CAL YR 2006 TOTAL 3179.6 MEAN 8.71 MAX 48 MIN 1.0 AC-FT 6310	MAX	20	10	7.0	5.0	7.0	22	59	88	63	27	35	18
	MIN	6.0	4.0	1.0	2.0	5.0	4.0	11	43	19	11	10	6.9

MAX DISCH: 104 CFS AT 06:30 ON May. 19, 2007 GH 3.16 FT. SHIFT -0.15 FT. MAX GH: 3.16 FT. AT 06:30 ON May. 19, 2007

18.4 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

6725.6 MEAN

WTR YR 2007

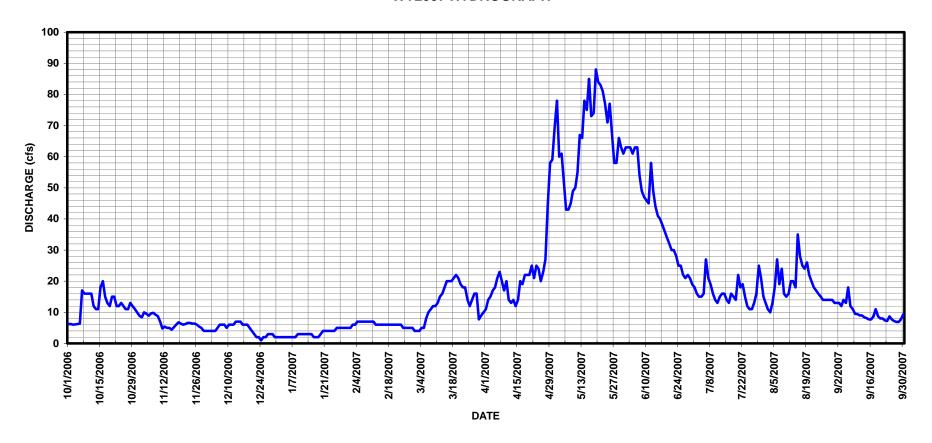
TOTAL

88 MIN

1.0 AC-FT

13340

# 08231000 LA GARITA CREEK NEAR LA GARITA CO WY2007 HYDROGRAPH



# 08235250 ALAMOSA RIVER ABOVE WIGHTMAN FORK NEAR JASPER, CO

LOCATION.--Lat 37°24′09", long 106°31′17", in SE4SW4 sec.35, T.37 N., R.4 E., Rio Grande Co. Hydrologic Unit 13010002, Rio Grande National Forest, on left bank 150' upstream from Wightman Fork, 1.9 mi downstream from Bitter Creek, 4.1 mi west of Jasper, and 4.2 mi southeast of Summitville.

DRAINAGE AREA AND PERIOD OF RECORD. -- 37.8 mi<sup>2</sup>.

GAGE. -- Sutron Accubar water level sensor and satellite telemetry data collection platform in a 4 ft by 4 ft by 8 ft steel building. Data collection platform also monitors Hydrolab for water-quality (water temperature, conductance, and pH) data collection.

REMARKS.--Record complete for period of operation, October 1, 2006 to Nov.5, 2006, April 14 to September 30, 2007, except for Nov. 5, 2006 and April 14, 2007 when there were missing satellite data. Gage-height not representative of average, ("e" record) Oct. 1-15, 2006, Jul. 26-31, Aug. 1-5, 2007 due to silt around the orifice line causing many high pressure transducer readings. Record is fair except for periods of missing gage-height record, and periods when gage height was not representative of average which are poor. Station maintained and record developed by private consultant; record reviewed by Div. III Personnel.

RATING TABLE. -- ALAWIGCO05 USED FROM 01-OCT-2006 TO 30-SEP-2007

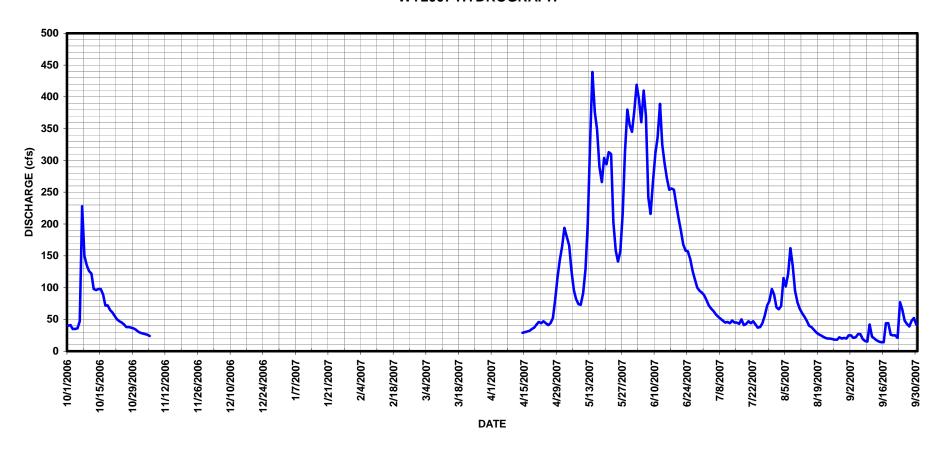
#### DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	29	_	_	_	_	_	165	377	88	69	25
2	41	28	_	_	_	_	_	194	419	80	66	25
3	35	27	_	_	_	_	_	180	395	72	71	21
4	35	26	_	_	_	_	_	166	360	67	115	22
5	36	24	_	_	_	_	_	127	410	63	102	27
6	47	_	_	_	_	_	_	96	370	58	122	27
7	228	_	_	_	_	_	_	82	242	54	162	19
8	150	_	_	_	_	_	_	74	216	51	133	16
9	135	_	_	_	_	_	_	73	266	48	95	15
10	126	-	-		-	_	-	91	311	45	77	42
11	122	-	-		-	_	-	129	336	46	67	23
12	98	-	-		-	_	-	201	389	44	60	20
13	96	-	-		-	_	-	331	325	48	54	17
14	98	-	_	-	-	_	29	439	295	45	48	15
15	98	_	_	-	-	_	30	376	272	45	40	14
16	89	_	_	_	_	_	31	349	254	43	38	14
17	72	_	_	-	-	_	32	290	256	50	34	44
18	72	-	-	_	-	-	35	266	254	41	30	44
19	65	_	_	-	-	_	37	304	230	43	27	26
20	61	-	-	-	-	-	42	294	209	47	25	25
21	55	-	-	-	-	-	46	313	189	44	23	25
22	50	-	-	-	-	-	44	310	168	47	21	21
23	47	-	-	-	-	-	47	203	158	42	20	77
24	45	-	-	-	-	-	44	158	157	37	20	66
25	42	-	_	-	_	_	41	141	145	38	19	48
26	38	-	_	-	_	_	44	157	126	44	18	43
27	38	-	_	-	_	_	52	217	113	56	18	39
28	37	-	_	-	_	_	80	313	100	72	22	48
29	36	-	_	-		_	116	380	95	79	20	52
30	34	_	_	_		_	143	356	92	98	21	42
31	31		-	-		-		345		89	20	
TOTAL	2197	134	-	-	_	_	893	7120	7529	1724	1657	942
MEAN	70.9	4.47	_	-	-	_	29.8	230	251	55.6	53.5	31.4
AC-FT	4360	266	_	-	-	_	1770	14120	14930	3420	3290	1870
MAX	228	29	_	_	_	_	143	439	419	98	162	77
MIN	31	24	_	-	-	_	29	73	92	37	18	14

PERIOD OF RECORD 22196 AC-FT WTR YR 2007 TOTAL 44030 (PARTIAL YEAR RECORD)

MAX DISCH: 612 CFS AT 21:00 ON Jun. 5, 2007 GH 4.87 FT. SHIFT 0.07 FT. MAX GH: 4.92 FT. AT 22:45 ON Aug. 5, 2007

# 08235250 ALAMOSA RIVER ABOVE WIGHTMAN FORK NEAR JASPER CO WY2007 HYDROGRAPH



#### 08235270 WIGHTMAN FORK BELOW CROPSY CREEK NEAR SUMMITVILLE, CO

LOCATION.--Lat. 37°25'45", long 106°35'03", in NW4NW4 sec. 29, T.37N., R.4 E., Rio Grande Co., Hydrologic Unit 13010002, on left bank about 200 ft. downstream from Cropsy Crek, and 0.25 mi east of Summitville.

DRAINAGE AREA AND PERIOD OF RECORD.--4.44 mi². July 1995 to current year (seasonal records only).

GAGE. -- The primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a Sutron Accubar bubbler gage in a 4 ft. by 4 ft. 8 ft. steel building. Elevation of gage is 11,120 ft. above sea level.

REMARKS.--Record is complete for period of operation, October 1 to November 5, 2006 and May 6 to September 30, 2007, except for November 5, 2006 and May 6, 2007 when there were missing data. Stage discharge relationship was affected by ice October 19, 22, 26, 27, 31, Nov. 1-4, 2006. Data from the staff gage was used to apply corrections to DCP data. Record is fair, except for periods of no gage height and iceaffected record, which are poor. Station maintained and record developed by private consultant; record reviewed by Div. III Hydrographic Staff.

RATING TABLE. --WFKCROCO05 USED FROM 01-OCT-2006 TO 30-SEP-2007

#### DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

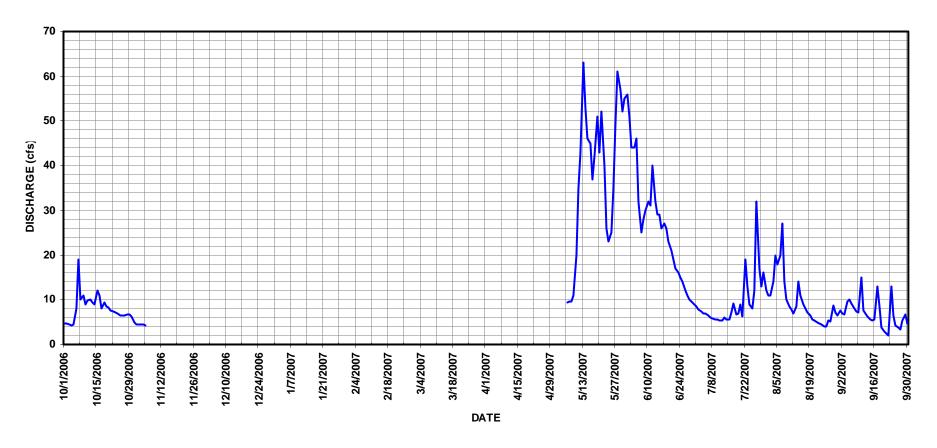
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	4.5	_	_	_	_	_	_	56	8.5	11	7.7
2	4.6	4.5	_	_	_	_	_	_	51	7.9	11	7.0
3	4.5	4.5	_	_	_	_	_	_	44	7.3	14	6.7
4	4.3	4.5	_	_	_	_	_	_	44	7.0	20	9.6
5	4.4	4.3	_	_	_	_	_	_	46	6.9	18	10
6	8.0	_	_	_	_	_	_	9.5	32	6.4	20	9.1
7	19	_	_	_	_	_	_	9.6	25	6.1	27	8.1
8	10	_	_	_	_	_	_	9.7	28	5.9	14	7.3
9	11	_	_	_	_	_	_	11	30	5.6	10	7.2
10	9.0	_	_	_	_	_	_	20	32	5.5	8.6	15
11	9.8	_	_	_	_	_	_	35	31	5.4	7.9	7.5
12	10	_	_	_	_	_	_	43	40	5.4	7.0	6.9
13	9.5	_	-	-	-	-	-	63	32	6.1	8.6	6.3
14	8.9	_	_	_	-	-	-	53	29	5.5	14	5.7
15	12	_	-	-	-	-	-	46	29	5.5	11	5.4
16	11	_	-	_	_	_	_	45	26	7.2	8.9	5.5
17	8.1	_	-	_	_	_	_	37	27	9.1	8.0	13
18	9.5	-	_	-	-	-	-	42	26	6.8	7.2	8.7
19	8.5	-	_	-	-	-	-	51	23	6.9	6.4	3.9
20	8.2	-	_	-	_	-	-	43	21	9.0	5.7	2.8
21	7.7	-	_	-	_	-	-	52	19	6.3	5.4	2.5
22	7.4	-	_	-	_	-	-	40	17	19	5.0	2.0
23	7.2	-	-	-	-	-	-	26	16	13	4.7	13
24	6.9	-	-	-	-	-	-	23	15	9.0	4.5	6.5
25	6.5	-	-	-	-	-	-	25	14	8.1	4.0	4.2
26	6.5	-	-	-	-	-	-	35	12	12	4.0	3.7
27	6.5	-	-	-	-	-	-	49	11	32	5.3	3.3
28	6.7	-	-	-	-	-	-	61	10	17	5.2	5.4
29	6.6	-	-	-		-	-	57	9.5	13	8.8	6.7
30	6.3	-	-	-		-	-	52	8.9	16	7.2	4.6
31	5.0		-	-		-		55		12	6.5	
TOTAL	248.3	22.3	-	-	-	_	-	992.8	804.4	291.4	298.9	205.3
MEAN	8.01	.74	-	-	-	_	-	32.0	26.8	9.40	9.64	6.84
AC-FT	493	44	-	-	-	-	-	1970	1600	578	593	407
MAX	19	4.5	-	-	-	_	-	63	56	32	27	15
MIN	4.3	4.3	-	=	-	-	_	9.5	8.9	5.4	4.0	2.0

WTR YR 2007 PERIOD OF RECORD TOTAL 2863.4 AC-FT 5680 (PARTIAL YEAR RECORD)

MAX DISCH: 251 CFS AT 15:45 ON Jul. 27, 2007 GH 6.44 FT. SHIFT -0.15 FT. MAX GH: 6.44 FT. AT 15:45 ON Jul. 27, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08235270 WIGHTMAN FORK BELOW CROPSY CREEK NEAR SUMMITVILLE CO WY2007 HYDROGRAPH



#### 08235290 WIGHTMAN FORK AT MOUTH NEAR JASPER, CO

LOCATION.--Lat. 37°24'14", long 106°31'16", in SE4SW4 sec. 35, T.37 N., R.4 E., Rio Grande County, Hydrologic Unit 13010002, on right bank 25' downstream from bridge on Forest Development Road No. 250, about 300' upstream from confluence with Alamosa River, and 4.3 mi southwest of Jasper.

DRAINAGE AREA AND PERIOD OF RECORD. --16.1 mi<sup>2</sup>. July 1995 to current year (seasonal record only).

GAGE.--Shelter is a 4 ft by 4 ft by 8 ft steel building for this station and includes equipment for the station "Alamosa River above Wightman Fork". Equipment for this station includes a DCP (data collection platform) which collects gage-height data from a Sutron Accubar and water quality data from a Hydrolab. The DCP is satellite monitored. Outside staff gage.

REMARKS.--Record is complete for the period of operation, October 1, - November 5, 2006, April 14 to September 30, 2007, except for November 5, 2006 and April 14, 2007 when there was missing data. Gage height was affected by ice October 18 - 31, November 1 - 4, 2006. Record is good, except for periods of no gage height and ice affected record, which are poor. Station maintained and record developed by private consultant; record reviewed by Div. III Hydrographic Staff.

RATING TABLE. -- WFKMOUCO05 USED FROM 01-OCT-2006 TO 30-SEP-2007

## DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

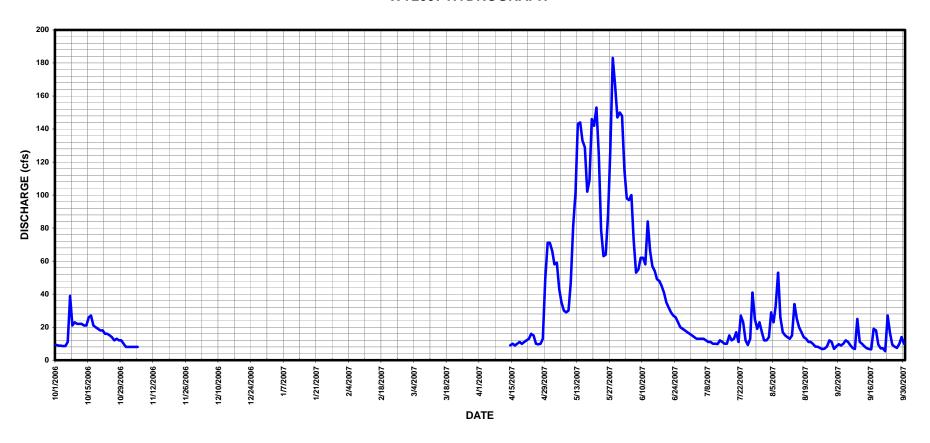
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	8.0	_	_	_	_	_	71	148	15	12	8.4
2	8.8	8.0	_	_	_	_	_	66	115	14	12	9.7
3	8.8	8.0	_	_	_	_	_	58	98	13	14	8.9
4	8.5	8.0	_	_	_	_	_	59	97	13	29	10
5	8.6	8.0	_	_	_	_	_	43	100	13	23	12
6	11	_	_	_	_	_	_	35	73	13	33	11
7	39	_	_	_	_	_	_	30	53	12	53	9.1
8	21	_	_	_	_	_	_	29	55	11	26	7.4
9	23	_	_	_	_	_	_	30	62	11	17	6.8
10	22	_	_	_	_	_	_	47	62	10	15	25
11	22	_	_	_	_	_	_	81	58	10	14	11
12	22	_	_	_	_	_	_	102	84	9.8	13	10
13	21	_	_	_	_	_	_	143	66	12	15	8.4
14	21	_	_	_	_	_	9.0	144	57	11	34	7.3
15	26	_	_	_	_	_	10	133	54	10	25	6.8
16	27	_	_	_	_	_	8.9	129	49	10	20	6.6
17	21	_	_	_	_	_	10	102	48	15	17	19
18	20	_	_	_	_	_	11	109	45	12	14	18
19	19	_	_	_	_	_	9.9	146	41	13	13	9.5
20	18	_	_	_	_	_	11	142	35	17	11	7.2
21	18	-	-	_	_	_	12	153	32	11	11	7.2
22	16	-	-	_	_	_	13	124	29	27	9.8	5.4
23	16	-	-	_	_	_	16	79	27	23	8.2	27
24	15	_	_	_	_	_	15	63	26	12	8.1	17
25	14	-	-	_	_	_	10	64	23	9.2	7.4	9.4
26	12	_	_	_	_	_	9.6	89	20	13	6.7	8.2
27	13	_	_	_	_	_	10	128	19	41	7.1	7.5
28	12	_	-	_	_	_	13	183	18	25	8.3	9.9
29	12	_	_	_		_	49	166	17	19	12	14
30	10	_	-	_		_	71	147	16	23	11	10
31	8.0		-	-		-		150		17	6.9	
TOTAL	523.0	40.0	-	-	_	-	288.4	3045	1627	465.0	506.5	327.7
MEAN	16.9	1.33	-	-	-	-	9.61	98.2	54.2	15.0	16.3	10.9
AC-FT	1040	79	_	-	_	_	572	6040	3230	922	1000	650
MAX	39	8.0	-	-	-	-	71	183	148	41	53	27
MIN	8.0	8.0	-	-	-	-	8.9	29	16	9.2	6.7	5.4

WTR YR 2007 PERIOD OF RECORD TOTAL 6822.6 AC-FT 13530 (PARTIAL YEAR RECORD)

MAX DISCH: 532 CFS AT 18:00 ON May. 28, 2007 GH 5.29 FT. GH CORR. -0.02 FT. SHIFT 0.11 FT. MAX GH: 5.27 FT. (GH CORR. -0.02 FT. APPLIED) AT 18:00 ON May. 28, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08235290 WIGHTMAN FORK AT MOUTH NEAR JASPER CO WY2007 HYDROGRAPH



#### ALAMOSA RIVER BELOW RANGER CREEK, CO

LOCATION.--Lat. 37°23'23", long. 106°22'41", Conejos County, on right bank, 30' above Silver Lakes Road Bridge, 0.4 miles below Ranger Creek and 4 miles above Terrace Reservoir.

DRAINAGE AREA AND PERIOD OF RECORD. -- N/A. Station established in water year 2003.

GAGE. -- Sutron Accubar water level sensor and satellite telemetry data collection platform (DCP) in a 4' x 4' x 8' foot steel building. The DCP also monitors a Hydrolab to collect water quality information. Outside staff gage installed as base gage.

REMARKS.--Record is complete and reliable for the period of operation, Oct. 1 to Nov. 5, 2006 and Apr. 14 to Sep. 30, 2007, except for Nov. 5, 2006 and Apr. 14, 2007, when there were missing data. The stage-discharge relation was affected by ice Oct. 19 and 27, 2006. Graphical analysis of the gage-height record indicates that the Accubar pressure sensor continuously 'hunts' the point of pressure equilibrium. This hunting creates some uncertainty in gage-height record. Due to this uncertainty, the record should be considered fair, except for periods of no gage-height or ice affected record, which are poor. Station maintained and record developed by private consultant; record reviewed by Div. III Hydrographic Staff.

RATING TABLE. -- ALARANCO04 USED FROM 01-OCT-2006 TO 30-SEP-2007

#### DISCHARGE, IN CFS, PERIOD OF RECORD WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

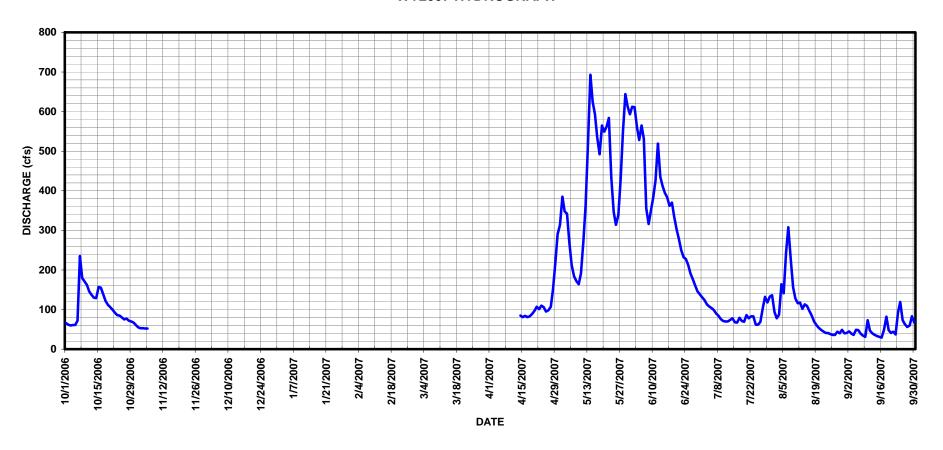
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	55	_	_	_	_	_	314	612	131	94	41
2	62	53	_	_	_	_	_	385	611	124	78	45
3	60	53	_	_	_	_	_	348	561	113	87	39
4	61	52	_	-	_	_	_	342	528	108	164	36
5	61	52	_	-	_	_	_	271	565	104	141	49
6	72	_	_	-	-	_		212	531	99	244	48
7	235	_	_	-	_	_	_	184	356	90	308	39
8	180	_	_	-	_	_	_	172	316	84	228	34
9	171	-	-	_	-	-	-	164	349	76	156	31
10	162	-	-	_	-	-	-	191	384	71	128	73
11	146	-	-	_	-	-	-	271	426	70	116	47
12	137	_	-	_	-	-	_	363	519	70	118	40
13	130	-	-	-	-	-	-	521	435	74	102	36
14	129	-	-	-	-	-	85	693	412	78	113	33
15	157	-	-	-	-	-	81	625	394	68	109	31
16	155	-	-	-	-	-	84	593	384	67	96	29
17	138	_	-	-	-	_	81	535	362	79	85	49
18	122	_	-	-	-	_	83	492	370	71	70	82
19	112	_	_	_	-	-	89	565	335	69	61	48
20	106	_	_	_	-	-	96	549	303	86	54	41
21	100	_	_	_	-	-	107	562	279	78	49	44
22	92	-	-	_	-	-	101	584	250	83	45	37
23	86	-	-	_	-	-	110	434	232	83	41	93
24	85	-	-	_	-	-	106	347	228	62	41	119
25	80	-	-	_	-	-	95	314	212	62	38	73
26	75	-	-	_	-	-	98	338	191	69	36	63
27	77	_	_	-	_	-	107	425	176	104	36	56
28	72	-	-	_	-	-	152	549	160	132	44	60
29	70	_	_	-		-	221	644	146	118	40	83
30	67	-	_	-		_	290	613	138	133	49	67
31	61		-	-		-		593		136	40	
TOTAL	3327	265	-	-	-	-	1986	13193	10765	2792	3011	1566
MEAN	107	8.83	_	_	-	-	66.2	426	359	90.1	97.1	52.2
AC-FT	6600	526	-	-	-	-	3940	26170	21350	5540	5970	3110
MAX	235	55	-	_	-	-	290	693	612	136	308	119
MIN	60	52	-	_	_	-	81	164	138	62	36	29

WTR YR 2007 PERIOD OF RECORD TOTAL AC-FT 73200 (PARTIAL YEAR RECORD) 36905

MAX DISCH: 850 CFS AT 21:45 ON May. 29, 2007 GH 5.07 FT. GH CORR. -0.03 FT. SHIFT -0.04 FT. MAX GH: 5.04 FT. (GH CORR. -0.03 FT. APPLIED) AT 21:45 ON May. 29, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## ALAMOSA RIVER BELOW RANGER CREEK CO WY2007 HYDROGRAPH



#### 08236000 ALAMOSA CREEK ABOVE TERRACE RESERVOIR, CO

LOCATION.--Lat 37°22'29", long 106°20'03", in NW4NE4 sec. 17, T.36 N., R.6 E., Conejos County, Hydrologic Unit 13100002, on left bank 0.8 mi upstream from high-water line of Terrace Reservoir at elevation 8,568 ft., 3.0 mi. downstream from French Creek, and 15 mi. northwest of Capulin.

DRAINAGE AREA. -- 107 mi<sup>2</sup>.

GAGE. -- Primary record is generated by an electronic data logger with satellite transmitter, which records gage height data from a float operated shaft encoder in a 4-ft. diameter metal shelter and well. Station is also equipped with an air temperature sensor. Graphic water-stage recorder is operated as a data backup. Datum of gage is 8,600 ft., from topographic map.

REMARKS.--Record is complete and reliable, except for Dec. 22-26, 2006, when the well was frozen, and Dec. 27, 2006 through Mar. 19, 2007, when the station was closed for the winter. Stage-discharge relation was affected by ice Nov. 12-18, 30, Dec. 1-21, 2006. Record is good, except for the periods of ice-affected record and no gage height record, which are fair to poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

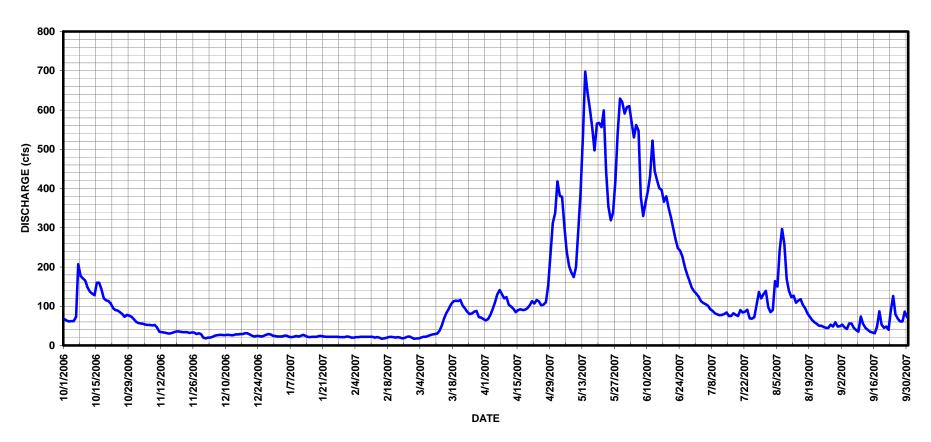
RATING TABLE. -- ALATERCO17 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHA	INGE, IN C	ME.	AN VALUES		IO SEFIE	MDER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DIII	001					111111	212 11					
1	67	60	18	23	22	17	64	338	607	132	98	49
2	63	57	20	23	20	18	67	418	610	124	85	53
3	61	56	20	23	20	18	78	381	571	113	90	46
4	62	55	22	25	21	20	92	379	530	108	164	42
5	62	53	25	25	21	22	110	301	562	105	150	56
6	73	52	26	22	22	22	130	239	547	101	243	56
7	207	52	27	21	22	24	141	202	379	92	297	45
8	177	51	27	22	22	26	131	186	330	88	259	39
9	171	52	26	24	22	28	120	174	363	82	169	35
10	165	46	27	23	22	29	123	200	393	79	139	74
11	148	35	27	24	22	30	103	294	432	77	123	55
12	137	34	26	27	20	37	99	390	522	78	127	45
13	132	33	26	25	21	51	93	535	444	80	109	40
14	128	32	28	22	20	69	85	698	421	84	114	35
15	160	30	28	21	17	83	90	643	401	75	118	33
16	160	31	29	22	18	93	92	604	396	75	103	31
17	143	33	29	22	19	105	90	555	366	82	94	47
18	120	35	31	22	21	112	91	497	380	78	81	87
19	115	36	31	24	22	114	95	565	351	75	73	53
20	113	35	28	24	21	113	102	567	326	90	65	45
21	107	34	25	23	20	116	113	556	299	84	59	48
22	95	34	23	22	21	102	107	599	270	86	55	40
23	90	34	24	22	20	94	116	441	248	91	50	89
24	89	32	24	22	18	86	112	354	241	69	50	126
25	85	33	23	22	19	80	102	319	226	68	47	79
26	80	33	24	22	22	81	104	338	200	72	45	68
27	73	29	27	22	23	86	110	421	181	103	45	61
28	78	31	29	21	20	88	152	537	164	136	53	61
29	76	29	28	21		72	235	629	147	120	48	86
30	73	20	25 24	21		71	312	620	138	131	59	72
31	67		24	23		67		591		139	48	
TOTAL	3377	1177	797	705	578	1974	3459	13571	11045	2917	3260	1696
MEAN	109	39.2	25.7	22.7	20.6	63.7	115	438	368	94.1	105	56.5
AC-FT	6700	2330	1580	1400	1150	3920	6860	26920	21910	5790	6470	3360
MAX	207	60	31	27	23	116	312	698	610	139	297	126
MIN	61	20	18	21	17	17	64	174	138	68	45	31
CAL YR	2006	TOTAL	33691	MEAN	92.3 MAX	599	MIN	10	AC-FT	66830		
WTR YR		TOTAL	44556		122 MAX	698			AC-FT	88380		

MAX DISCH: 793 CFS AT 03:00 ON May. 14, 2007 GH 2.93 FT. SHIFT -0.04 FT. MAX GH: 2.93 FT. AT 03:00 ON May. 14, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08236000 ALAMOSA CREEK ABOVE TERRACE RESERVOIR CO WY2007 HYDROGRAPH



#### 08236500 ALAMOSA CREEK BELOW TERRACE RESERVOIR, CO

LOCATION.--Lat 37°21'15", long 106°16'45", NE4SE4 sec. 23, T.36 N., R.6 E., Conejos County, Hydrologic Unit 13010002, on left bank 0.5 mi downstream from Terrace Reservoir, 12.0 mi northwest of Capulin, Co.

DRAINAGE AREA. -- 116 mi<sup>2</sup>.

GAGE.--The primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a 6-foot square concrete aggregate shelter and 3 foot diameter concrete well. A graphic water-stage recorder is operated as a data backup. Elevation of gage is 8,375 ft, from topographic map.

REMARKS.--Record is complete and reliable, except for February 1-12, 2007, when there was missing satellite data; and December 24, 2006 to January 31, 2007, and February 13 to March 6, 2007 when the well was frozen. Record is good, except for periods of no gage height record, which are fair. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

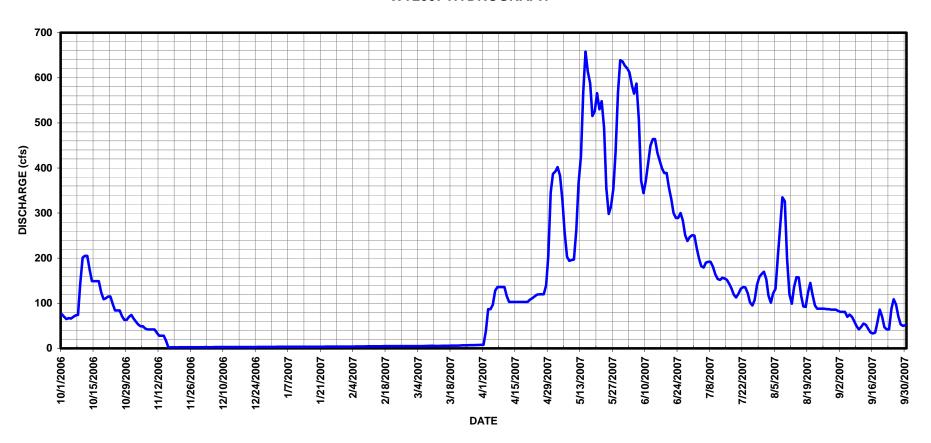
RATING TABLE. -- ALABELCO13 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	76	66	2.6	3.3	3.8	5.0	7.9	387	627	250	153	83		
2	70	59	2.7		3.9	5.0	39	392	621	223	117	81		
3	65	53	2.6		4.0	5.0	87	402	612	199	101	81		
4	67	49	2.6		4.0	5.0	87	383	584	182	122	81		
5	66	49	2.6		4.1	5.0	97	329	565	179	132	70		
6	70	44	2.8		4.2	5.0	128	257	587	190	201	75		
7	73	42	2.8		4.2	5.2	136	203	506	192	270	70		
8	74	42			4.4	5.3	136	194	372	192	335	60		
9	143	42		3.4	4.4	5.5	136	196	344	181	326	49		
10	201	42	2.8	3.4	4.6	5.5	136	197	371	164	200	42		
11	205	35	2.8	3.4	4.6	5.4	116	263	411	154	120	48		
12	205	28	2.8	3.6	4.7	5.3	103	366	449	152	99	55		
13	176	28	2.8	3.6	4.7	5.4	103	426	464	156	136	52		
14	149	28	2.8	3.6	4.7	5.5	103	566	464	155	158	43		
15	149	17	3.0	3.6	4.7	5.7	103	658	434	152	157	35		
16	149	2.3	3.0	3.6	4.7	5.6	103	614	417	143	117	33		
17	149	2.3	3.0	3.6	4.8	5.7	103	588	399	133	93	35		
18	124	2.3	3.0	3.6	4.8	6.1	103	515	389	119	92	59		
19	109	2.3	3.0		4.8	6.1	103	526	389	113	123	86		
20	111	2.3	3.0		4.9	6.2	103	566	357	121	145	70		
21	115	2.4	3.0		5.0	6.2	108	530	331	132	119	47		
22	115	2.4			5.0	6.5	111	548	300	136	95	42		
23	98	2.5	3.0		5.0	6.6	115	489	289	135	88	42		
24	84	2.5	3.0		5.0	6.7	119	356	289	122	88	88		
25	84	2.5	3.2		5.0	6.9	120	298	300	102	88	109		
26	84	2.5	3.2		5.0	7.1	120	314	284	95	88	97		
27	71	2.5	3.2		5.0	7.1	120	354	251	107	87	71		
28	63	2.5	3.2		5.0	7.2	140	436	238	141	87	53		
29	63	2.6				7.4	206	568	247	158	86	50		
30	70	2.6	3.2			7.5	346	639	251	165	86	51		
31	74		3.2	3.8		7.7		636		170	86			
TOTAL	3352	660.5	90.7	111.4	129.0	185.4	3537.9	13196	12142	4813	4195	1858		
MEAN	108	22.0	2.93	3.59	4.61	5.98	118	426	405	155	135	61.9		
AC-FT	6650	1310	180	221	256	368	7020	26170	24080	9550	8320	3690		
MAX	205	66	3.2	3.8	5.0	7.7	346	658	627	250	335	109		
MIN	63	2.3	2.6	3.3	3.8	5.0	7.9	194	238	95	86	33		
CAL YR	2006	TOTAL	34164.1	MEAN	93.6 MAX	6	17 MIN	2.3	AC-FT	67760				
WTR YR	2007	TOTAL	44270.9		121 MAX		58 MIN		AC-FT	87810				

MAX DISCH: 669 CFS AT 15:45 ON May. 14, 2007 GH 4.29 FT. SHIFT 0.01 FT. MAX GH: 4.29 FT. AT 15:45 ON May. 14, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08236500 ALAMOSA CREEK BELOW TERRACE RESERVOIR CO WY2007 HYDROGRAPH



#### 08238000 LA JARA CREEK AT GALLEGOS RANCH NEAR CAPULIN, CO

LOCATION.--Lat 37°12'32", long 106°11'16", in NE¼ sec. 10, T.34 N., R.7 E., Conejos County, Hydrologic Unit 13010002, on left bank 2.7 mi. downstream from Canyon Del Rancho, 7 mi. southwest of Capulin, and 16.5 mi. downstream from La Jara Reservoir.

DRAINAGE AREA. -- 98 mi<sup>2</sup>.

GAGE.--The primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder and precipitation data from a tipping-bucket rain gage in a 42-inch diameter CMP shelter and well. A graphic water-stage recorder is operated as a data backup. Elevation of gage is 8,130 ft from topographic map.

REMARKS.--Record is complete and reliable, except for Dec. 22, 2006 through Mar. 19, 2007, when the station was closed for the winter. Stage-discharge relation was affected by ice Oct. 27, 2006, Nov. 11-30, 2006, and Dec. 1-21, 2006. Record is good, except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

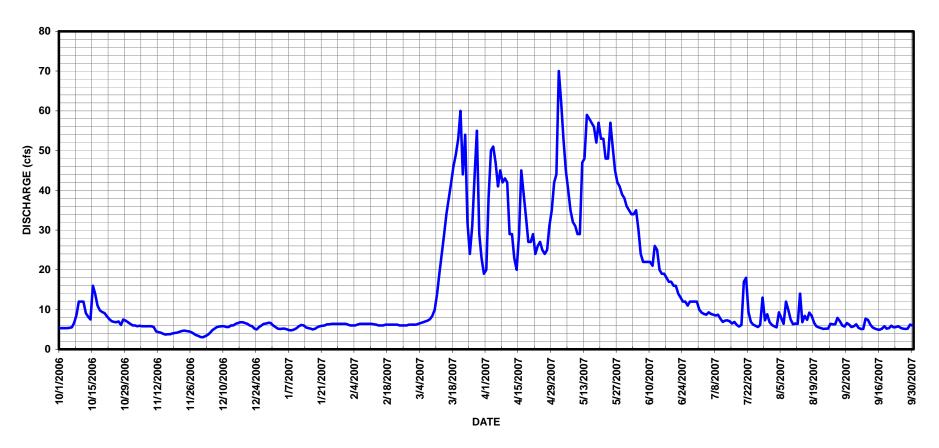
RATING TABLE. -- LAJCAPCO19TMP USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	5.3	6.0	3.0	5.6	6.2	6.2	20	44	35	10	6.1	5.7		
2	5.3	6.0	3.3	5.2	6.0	6.2	38	70	34	9.2	5.8	6.6		
3	5.3	5.8	3.6	5.1	6.0	6.4	50	62	34	8.9	5.5	6.2		
4	5.3	5.9	4.1	5.2	6.0	6.6	51	53	35	8.7	9.3	5.6		
5	5.4	5.8	4.8	5.2	6.2	6.8	47	45	30	9.3	7.9	5.8		
6	5.5	5.8	5.2	5.0	6.4	7.0	41	40	24	8.9	6.4	6.3		
7	6.6	5.8	5.6	4.8	6.4	7.2	45	35	22	8.7	12	5.4		
8	8.6	5.8	5.7	4.8	6.4	7.6	42	32	22	8.5	10	5.1		
9	12	5.8	5.8	5.0	6.4	8.4	43	31	22	8.7	7.5	5.1		
10	12	5.6	5.8	5.3	6.4	10	42	29	22	7.7	6.3	7.7		
11	12	4.5	5.6	5.8	6.4	14	29	29	21	6.9	6.5	7.4		
12	9.1	4.3	5.6	6.1	6.3	19	29	47	26	7.2	6.4	6.2		
13	8.2	4.2	6.0	6.0	6.2	24	23	48	25	7.3	14	5.5		
14	7.5	3.9	6.0	5.5	6.0	29	20	59	20	7.0	6.8	5.2		
15	16	3.7	6.4	5.3	6.0	34	29	58	19	6.5	8.4	5.0		
16	14	3.8	6.6	5.2	6.0	38	45	57	19	6.9	7.4	4.9		
17	11	3.8	6.8	5.0	6.2	42	39	56	18	6.1	9.2	5.2		
18	9.8	4.0	6.8	5.2	6.2	46	33	52	17	5.7	8.4	5.8		
19	9.4	4.1	6.6	5.6	6.2	49	27	57	17	6.1	6.7	5.2		
20	9.1	4.2	6.4	5.8	6.2	53	27	53	16	17	5.8	5.3		
21	8.3	4.4	6.0	5.9	6.2	60	29	53	16	18	5.5	5.9		
22	7.6	4.6	5.8	6.0	6.2	44	24	48	14	9.4	5.3	5.5		
23	7.1	4.7	5.2	6.3	6.0	54	26	48	13	6.9	5.1	5.6		
24	6.9	4.6	5.0	6.3	6.0	32	27	57	12	6.2	5.2	5.8		
25	6.8	4.5	5.6	6.4	6.0	24	25	51	12	5.9	5.2	5.4		
26	7.0	4.3	6.0	6.4	6.0	31	24	45	11	5.6	6.4	5.2		
27	6.1	4.0	6.4	6.4	6.2	43	25	42	12	6.1	6.3	5.1		
28	7.5	3.6	6.5	6.4	6.2	55	31	41	12	13	6.3	5.2		
29	7.3	3.4	6.7	6.4	0.2	29	35	39	12	7.3	7.9	6.2		
30	6.8	3.1	6.6	6.4		23	42	38	12	8.8	7.3	6.0		
31	6.4		6.0	6.4		23 19	42	36		6.8	6.0	0.0		
31	6.4		6.0	6.4		19		36		6.8	6.0			
TOTAL	255.1	140.0	175.5	176.0	172.9	834.4	1008	1455	604	259.3	222.7	171.1		
MEAN	8.23	4.67	5.66	5.68	6.17	26.9	33.6	46.9	20.1	8.36	7.18	5.70		
AC-FT	506	278	348	349	343	1660	2000	2890	1200	514	442	339		
MAX	16	6.0	6.8	6.4	6.4	60	51	70	35	18	14	7.7		
MIN	5.3	3.1	3.0	4.8	6.0	6.2	20	29	11	5.6	5.1	4.9		
CAL YR	2006	TOTAL	3652	MEAN	10.0 MAX		12 MIN	3	AC-FT	7244				
WTR YR		TOTAL	5474		15 MAX		0 MIN		AC-FT	10860				
		· - <del>-</del>						-						

MAX DISCH: 106 CFS AT 18:30 ON Jul. 20, 2007 GH 2.04 FT. GH CORR. 0.01 FT. SHIFT 0.03 FT. MAX GH: 2.05 FT. (GH CORR. 0.01 FT. APPLIED) AT 18:30 ON Jul. 20, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08238000 LA JARA CREEK AT GALLEGOS RANCH NEAR CAPULIN CO WY2007 HYDROGRAPH



#### SOUTH CHANNEL NORTON DRAIN DITCH NEAR LA SAUSES, CO

LOCATION.--Lat 37°17'54", long 105°51'00, SW4SW4 sec. 2, T.35 N., R.10 E., Conejos County, Hydrologic Unit 13100002, on right bank of ditch.

#### DRAINAGE AREA.--N/A

GAGE.--Primary record is generated by an electronic data logger with satellite transmitter, which records gageheight data from a float-operated shaft encoder in a steel shelter and a 24-inch diameter CMP well at a three-foot Parshall Flume. A graphic water-stage recorder is operated as a data backup.

REMARKS.--Record is complete and reliable, except for November 22, 2006 through March 13, 2007, when station was closed for the winter. Stage-discharge relation was affected by ice November 11, 13-21, 2006, and March 29, 2007. Record is good except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

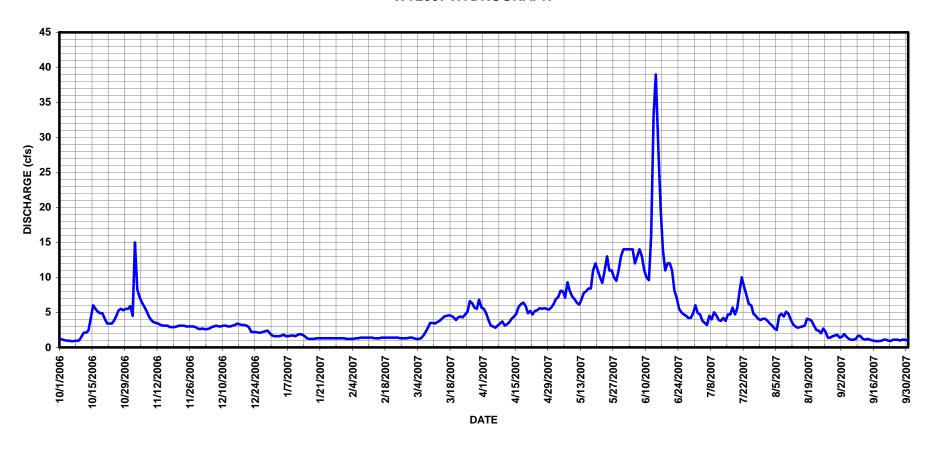
RATING TABLE. -- NORDSCCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DIOCII	intol/ in c		CAN VALUE	IS	10 00111	IIIDDIC 2007			
DA.	Y OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
:	1 1.2	4.5	2.7	1.6	1.2	1.4	5.5	6.2	14	6.0	3.8	1.4
1	2 1.1	15	2.6	1.6	1.2	1.3	4.9	6.9	14	4.9	3.4	1.5
	3 1.0	8.3	2.6	1.6	1.2	1.2	3.9	7.2	14	4.7	3.1	1.9
	4 .97	7.1	2.7	1.7	1.2	1.2	3.1	8.1	14	3.8	2.7	1.5
	5 .93	6.4	2.9		1.3	1.3	3.0	8.0	12	3.5	2.5	1.2
	6 .87	5.8	3.0		1.3	1.7	2.8	7.1	13	3.2	4.5	1.1
	7 .93	5.2			1.4	2.2	3.1	9.3	14	4.5	4.8	1.1
	.93	4.4			1.4	2.8	3.4	8.1	13	4.0	4.4	1.2
	9 1.0	3.9			1.4	3.5	3.7	7.3	11	5.0	5.1	1.7
1		3.6			1.4	3.5	3.1	6.9	10	4.6	4.8	1.6
1		3.5			1.4	3.4	3.3	6.4	9.6	3.9	4.0	1.2
1:		3.4			1.4	3.6	3.6	6.1	16	3.8	3.3	1.1
13		3.2			1.3	3.8	4.1	6.8	33	4.2	3.0	1.2
1		3.1			1.3	4.1	4.4	7.8	39	3.8	2.8	1.1
1		3.1			1.3	4.4	4.8	8.0	29	4.7	2.9	1.0
1		3.1			1.4	4.5	5.8	8.4	20	4.7	3.0	.93
1		2.9			1.4	4.6	6.2	8.4	14	5.7	3.1	.90
1:		2.9			1.4	4.5	6.4	11	11	4.7	4.1	.91
1		2.9			1.4	4.3	5.9	12	12	5.6	4.0	.94
21		3.0			1.4	3.9	4.9	11	12	8.1	3.8	1.1
2:		3.1			1.4	4.3	5.2	10	11	10	3.1	1.1
2:		3.1			1.4	4.4	4.7	9.2	8.1	8.6	2.5	.97
2:		3.1			1.4	4.3	5.2 5.3	11	7.0	7.4	2.4	.92
2		3.0			1.3 1.3	4.7 5.1	5.6	13	5.5 5.0	6.2	2.0	1.1
2.		3.0 3.0			1.3	6.6	5.5	11 11	4.7	6.0 4.8	2.7 2.2	1.1 1.1
2		3.0			1.3	6.3	5.6	10	4.7	4.0	1.4	.99
2		2.9			1.4	5.7	5.5	9.5	4.3	4.1	1.4	1.1
2:		2.9			1.4	5.5	5.4	9.5	4.2	3.9	1.4	1.1
31		2.6				6.8	5.7	13	4.9	4.1	1.7	1.0
3:		2.0	1.7			5.7	J. /	14	4.9	4.1	1.8	
٥.	3.3		1.7	1.5		J. /		1-1		4.1	1.0	
TOTA	L 103.23	124.8	84.6	45.4	37.5	120.6	139.6	283.7	383.7	157.1	95.9	35.06
MEAN	3.33	4.16			1.34	3.89	4.65	9.15	12.8	5.07	3.09	1.17
AC-F		248			74	239	277	563	761	312	190	70
MAX	6.0	15		1.9	1.4	6.8	6.4	14	39	10	5.1	1.9
MIN	.87	2.6			1.2	1.2	2.8	6.1	4.2	3.2	1.4	.90
CAL :	YR 2006	TOTAL	1150.4	MEAN	3.15 MAX	1	.7 MIN	.47	AC-FT	2280		
WTR :	YR 2007	TOTAL	1611.19	MEAN	4.41 MAX	3	9 MIN	.87	AC-FT	3200		

MAX DISCH: 45.8 CFS AT 22:30 ON Jun. 13, 2007 GH 2.46 FT. SHIFT -0.11 FT. MAX GH: 2.46 FT. AT 22:30 ON Jun. 13, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## SOUTH CHANNEL NORTON DRAIN DITCH NEAR LA SAUSES CO WY2007 HYDROGRAPH



#### NORTON DRAIN NEAR LA SAUSES, CO

LOCATION.--Lat 37°20'10", long 105°46'13", NE4SW4 sec. 28, T.36 N., R.11 E., Conejos County, Hydrologic Unit 13010002, on left bank 2.5 mi east by northeast along canal from State Route 158.

#### DRAINAGE AREA. --N/A

GAGE.--Primary record is generated by an electronic data logger with satellite transmitter, which records gageheight data from a float-operated shaft encoder in a 36-inch diameter CMP shelter and well at a six-foot Parshall Flume. A graphic water-stage recorder is operated as a data backup. Note: On September 27, 2007 the flume was modified with steel ramp inserts to increase sensitivity and eliminate gage isolation at low flows.

REMARKS.--Record is complete and reliable, except for Nov. 22, 2006 - Mar. 13, 2007, when the station was closed for the winter. Stage-discharge relation was affected by ice Nov. 11, 13-21, 2006. Record is good except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

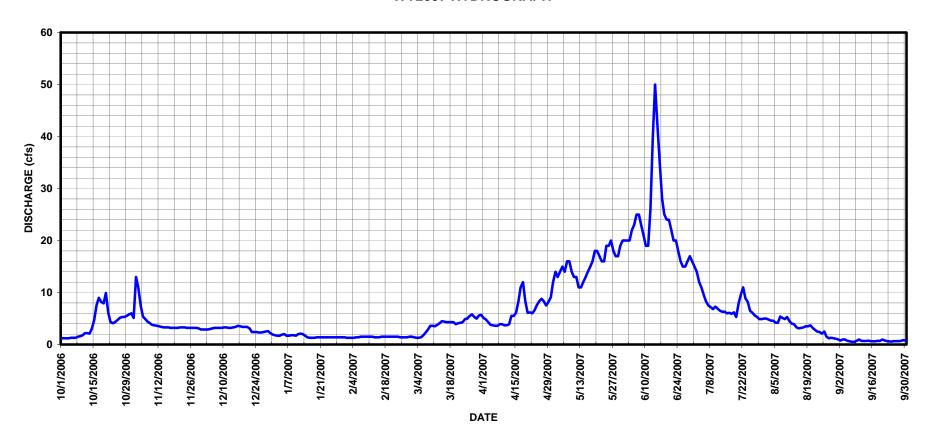
RATING TABLE. -- NORDLSCO03 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1.2	5.1	2.9	1.8	1.3	1.5	5.1	12	20	15	5.0	.98		
2		13		1.7	1.3	1.4	4.8	14	20	14	4.8	.78		
3		11		1.7	1.3	1.3	4.3	13	20	12	4.6	1.0		
4		7.5		1.9	1.3	1.3	3.8	14	22	11	4.6	.94		
5		5.4		2.0	1.4	1.4	3.7	15	23	9.5	4.2	.71		
6		4.9		1.7	1.4	1.8	3.6	14	25	8.3	4.2	.61		
7	1.3	4.4	3.2	1.7	1.5	2.3	3.6	16	25	7.5	5.4	.53		
8		4.1		1.8	1.5	2.9	3.9	16	23	7.2	5.1	.52		
9		3.8			1.5	3.6	3.9	14	21	6.8	4.9	.70		
10	1.8	3.7	3.3	1.7	1.5	3.6	3.7	13	19	7.3	5.3	.95		
11	2.2	3.6		2.0	1.5	3.5	3.7	13	19	6.9	4.5	.72		
12	2.2	3.5	3.2	2.1	1.5	3.8	3.9	11	26	6.5	4.0	.68		
13	2.1	3.4	3.2	2.0	1.4	4.1	5.5	11	40	6.3	3.9	.68		
14	3.1	3.3	3.3	1.7	1.4	4.5	5.5	12	50	6.3	3.3	.74		
15	4.7	3.3	3.4	1.4	1.4	4.4	6.1	13	42	6.0	3.1	.64		
16	7.6	3.3	3.6	1.3	1.5	4.3	8.3	14	35	6.1	3.2	.61		
17		3.2		1.3	1.5	4.3	11	15	28	5.9	3.3	.63		
18	8.2	3.2		1.3	1.5	4.3	12	16	25	6.2	3.5	.71		
19	7.9	3.2	3.4	1.4	1.5	4.3	8.4	18	24	5.3	3.5	.69		
20		3.2		1.4	1.5	3.9	6.1	18	24	7.9	3.7	.95		
21		3.3			1.5	4.1	6.2	17	22	9.6	3.2	.81		
22		3.3		1.4	1.5	4.2	6.0	16	20	11	2.8	.64		
23		3.3		1.4	1.5	4.3	6.6	16	20	8.9	2.5	.61		
24		3.2		1.4	1.4	4.9	7.6	19	18	8.2	2.4	.56		
25		3.2			1.4	5.0	8.3	19	16	6.5	2.1	.64		
26		3.2			1.4	5.5	8.8	20	15	6.1	2.5	.64		
27		3.2		1.4	1.4	5.8	8.3	18	15	5.6	1.5	.66		
28		3.2		1.4	1.5	5.3	7.5	17	16	5.3	1.2	.68		
29		3.1		1.4		5.0	8.2	17	17	4.9	1.3	.83		
30		2.9				5.6	9.1	19	16	4.9	1.2	.76		
31	6.0		1.9	1.4		5.7		20		5.0	1.1			
TOTAI	127.0	128.0	91.1	49.1	40.3	117.9	187.5	480	706	238.0	105.9	21.60		
MEAN	4.10	4.27	2.94	1.58	1.44	3.80	6.25	15.5	23.5	7.68	3.42	.72		
AC-F1	252	254	181	97	80	234	372	952	1400	472	210	43		
MAX	9.9	13	3.6	2.1	1.5	5.8	12	20	50	15	5.4	1.0		
MIN	1.2	2.9	1.9	1.3	1.3	1.3	3.6	11	15	4.9	1.1	.52		
CAL Y	R 2006	TOTAL	1524.87	MEAN	4.18 MAX	:	21 MIN	.52	AC-FT	3020				
WTR Y	R 2007	TOTAL	2292.4	MEAN	6.28 MAX	!	50 MIN	.52	AC-FT	4550				

MAX DISCH: 52.4 CFS AT 03:45 ON Jun. 14, 2007 GH 1.56 FT. SHIFT 0.07 FT. MAX GH: 1.56 FT. AT 03:45 ON Jun. 14, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## NORTON DRAIN NEAR LA SAUSES CO WY2007 HYDROGRAPH



08240000 RIO GRANDE ABOVE MOUTH OF TRINCHERA CREEK NEAR LASAUSES, CO

LOCATION.--Lat 37°18'58", long 105°44'32", in sec. 35, T.36 N., R.11 E., Conejos County, Hydrologic Unit 13010002, on right bank 0.2 mi upstream from the historical channel of Trinchera Creek, 3.2 mi north of Lasauses, and 13 mi southeast of Alamosa.

DRAINAGE AREA AND PERIOD OF RECORD. --5,740 mi<sup>2</sup>., approximately, includes 2,940 mi<sup>2</sup>. in closed basin in northern part of San Luis Valley, Co. May 1936 to current year. Water quality data from 1993 to 1996.

GAGE.--Graphic water-stage recorder, shaft encoder, and Sutron satellite monitoring equipment in a 7 ft. by 7 ft. exposed aggregate building with 4 ft. diameter concrete well. Elevation of gage is 7,500 ft, estimated from nearby level lines. Although the name of the station is Rio Grande above Mouth of Trinchera Creek, over a period of years Trinchera Creek has shifted allowing the majority of Trinchera Creek water to enter the Rio Grande River above the station.

REMARKS.--Record is complete and reliable, except for Dec. 4-20, 2006, when well was frozen; Dec. 21, 2006 through Mar. 13, 2007, when the station was closed for the winter; and April 13-26, June 28-July 12, 2007, when the inlets were temporarily plugging and naturally flushing. Stage-discharge relation was affected by ice Nov. 14-16, 28-30, December 1-3, 2006. Record is good, except for periods of no gage height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

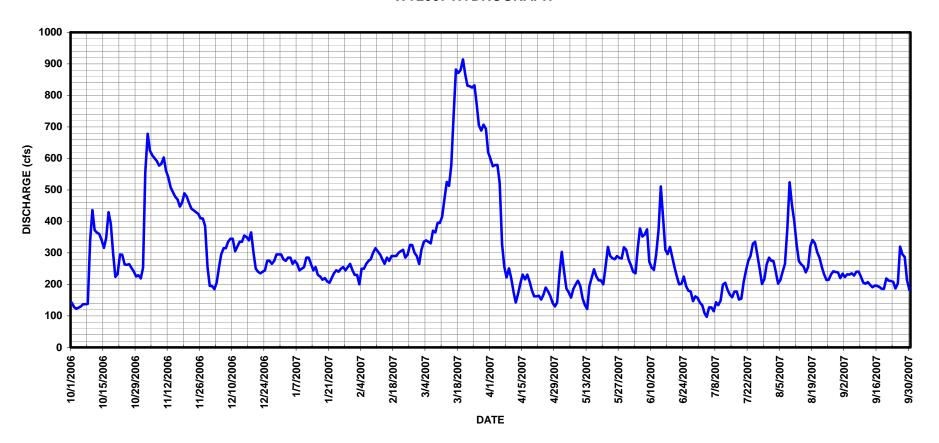
RATING TABLE. -- RIOTRICO12 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	142	253	195	280	230	265	598	235	261	142	275	234		
2	128	555	185	275	230	310	575	303	240	134	274	223		
3	123	678	205	285	200	335	579	239	235	109	239	232		
4	126	625	255	285	250	340	579	187	315	97	202	231		
5	130	610	295	265	250	335	522	174	378	127	215	235		
6	137	601	315	275	265	330	327	158	352	127	241	228		
7	137	591	315	265	275	370	256	185	358	115	265	240		
8	138	577	335	245	280	365	222	200	375	143	378	240		
9	340	583	345	250	300	395	251	212	272	134	524	224		
10	436	603	345	255	315	395	220	195	254	149	451	205		
11	372	561	305	285	305	415	175	156	246	199	401	202		
12	364	539	320	285	295	470	142	135	295	205	326	207		
13	360	508	335	265	280	525	169	122	373	183	274	198		
14	340	493	335	245	265	513	203	194	511	167	264	191		
15	316	478	355	255	285	578	231	222	410	159	257	196		
16	347	470	350	230	275	740	216	248	310	177	238	195		
17	429	447	340	225	290	882	231	225	296	178	255	192		
18	392	460	365	215	290	871	208	213	319	152	321	186		
19	298	489	300	220	290	880	181	213	287	155	341	186		
20	224	479	250	210	300	914	162	200	253	206	330	219		
21	233	459	240	205	305	867	162	255	225	242	302	212		
22	295	441	235	220	310	831	164	319	200	274	284	211		
23	294	435	240	235	285	829	152	290	202	290	255	208		
24	263	429	245	245	295	825	167	283	225	329	232	187		
25	262	424	275	240	325	832	190	280	194	335	214	203		
26	264	410	275	250	325	771	178	290	180	293	215	320		
27	252	409	265	255	300	705	163	284	178	248	232	295		
28	241	385	275	245	290	688	141	282	147	201	242	287		
29	225	255	295	255		707	130	318	162	217	239	215		
30	229	195	295	265		694	142	310	157	263	238	183		
31	219		295	245		619		280		285	220			
TOTAL	8056	14442	8980	7775	7905	18596	7636	7207	8210	6035	8744	6585		
MEAN	260	481	290	251	282	600	255	232	274	195	282	220		
AC-FT	15980	28650	17810	15420	15680	36890	15150	14300	16280	11970	17340	13060		
MAX	436	678	365	285	325	914	598	319	511	335	524	320		
MIN	123	195	185	205	200	265	130	122	147	97	202	183		
CAL YR	2006	TOTAL	76539	MEAN	210 MAX	67		73		151800				
WTR YR	2007	TOTAL	110171	MEAN	302 MAX	91	14 MIN	97	AC-FT	218500				

MAX DISCH: 926 CFS AT 01:15 ON Mar. 20, 2007 GH 4.59 FT. SHIFT 0.08 FT. MAX GH: 4.59 FT. AT 01:15 ON Mar. 20, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 08240000 RIO GRANDE ABOVE MOUTH OF TRINCHERA CREEK NEAR LASAUSES CO WY2007 HYDROGRAPH



#### 08240500 TRINCHERA CREEK ABOVE TURNERS RANCH, NEAR FORT GARLAND, CO

LOCATION.--Lat 37°22'16", long 105°17'05", Costilla County, Hydrologic Unit 13010002, in Sangre de Cristo Grant, on right bank 0.9 mi downstream from North Fork, 1.0 mi upstream from Turners Ranch, and 8.3 mi southeast of Fort Garland.

DRAINAGE AREA. -- 45 mi<sup>2</sup>.

WTR YR 2007

GAGE.--The primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a 6 ft. by 6 ft. exposed aggregate shelter and 3 ft. concrete well. A graphic water-stage recorder is operated as a data backup. Elevation of gage is 8,520 ft, from topographic map.

REMARKS.--Record is complete and reliable, except for Dec. 1-6, 2006, when floats were affected by ice in well; and Dec. 7, 2006 to Mar. 16, 2007, when the station was closed for the winter. The stage-discharge relation was affected by ice Nov. 14-18, 30, 2006, and Mar. 30, 31, 2007. Record is good, except for periods of no gage height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

RATING TABLE. -- TRITURCO14 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE	, IN CFS	S, WATER Y	EAR OCTOE AN VALUES		O SEPTE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	9.1	5.6	7.4	6.0	6.2	11	55	151	50	19	15
2	8.3	8.4	5.4	7.2	6.0	5.8	11	59	154	48	22	15
3	8.4	9.0	5.4	7.6	6.0	5.8	12	60	160	45	20	15
4	8.4	8.8	5.8	7.8	6.2	6.0	13	66	158	43	23	14
5	8.4	8.6	6.4	7.8	6.4	6.4	14	65	157	43	22	14
6	8.3	8.4	6.8	7.8	6.4	6.8	14	58	161	40	25	14
7	8.6	8.5	7.0	7.4	6.6	7.0	15	52	160	38	24	13
8	9.9	8.6	7.6	7.4	6.8	7.2	16	46	149	36	27	13
9	10	8.6	7.6	7.6	7.0	7.4	15	43	135	35	21	13
10	11	8.3	7.6	8.0	7.2	7.6	16	43	125	33	21	18
11	10	6.5	7.6	8.2	7.2	7.6	12	48	121	32	22	14
12	9.9	8.1	7.8	8.4	7.0	7.8	13	57	123	31	20	13
13	9.3	7.2	7.8	8.0	6.8	8.2	11	68	133	31	20	12
14	9.2	6.8	8.2	7.2	6.4	8.4	13	88	121	29	19	12
15	11	6.8	8.6	6.2	6.2	8.6	15	102	116	28	18	11
16	10	7.0	8.8	5.4	6.2	8.8	17	105	113	27	18	11
17	9.9	7.2	8.8	5.2	6.4	9.3	16	111	113	26	18	13
18	9.9	7.4	8.6	5.2	6.6	10	16	112	109	26	17	14
19	8.7	7.7	8.4	5.6	6.6	11	19	112	103	27	16	12
20	9.4	7.8	8.0	5.8	6.8	11	21	118	96	30	16	13
21	9.4	7.8	7.6	6.0	7.0	11	24	124	92	26	15	14
22	8.5	7.7	7.0	6.0	7.0	12	24	125	86	25	15	12
23	8.8	7.4	6.8	5.8	6.8	12	24	128 119	80	23 23	15	14
24	9.0	7.3 7.3	6.6	5.6	6.6	12	26		75 70	23	18	16
25 26	8.9 8.2	6.9	6.8 7.4	5.8 6.2	6.4 6.4	12 12	25 24	114 112	66	23	15 15	13 12
27	6.3	7.2	7.4	6.4	6.4	12	26	118	63	22	14	12
28	9.4	7.2	8.2	6.6	6.4	14	32	131	60	22	14	14
29	9.7	6.1	8.2	6.8		11	40	143	57	22	15	14
30	9.8	5.2	7.8	6.8		11	48	148	53	21	15	13
31	9.4		7.6	6.4		11		151		21	15	
TOTAL	284.4	228.7	229.6	209.6	183.8	286.9	583	2881	3360	950	574	403
MEAN	9.17	7.62	7.41	6.76	6.56	9.25	19.4	92.9	112	30.6	18.5	13.4
AC-FT	564	454	455	416	365	569	1160	5710	6660	1880	1140	799
MAX	11	9.1	8.8	8.4	7.2	14	48	151	161	50	27	18
MIN	6.3	5.2	5.4	5.2	6.0	5.8	11	43	53	21	14	11
CAL YR	2006	TOTAL	3172.7 MEA	N 8	3.69 MAX	16	MIN	5.0	AC-FT	6290		

MAX DISCH: 167 CFS AT 22:15 ON Jun. 6, 2007 GH 4.73 FT. SHIFT 0.01 FT. MAX GH: 4.73 FT. AT 22:15 ON Jun. 6, 2007

27.9 MAX

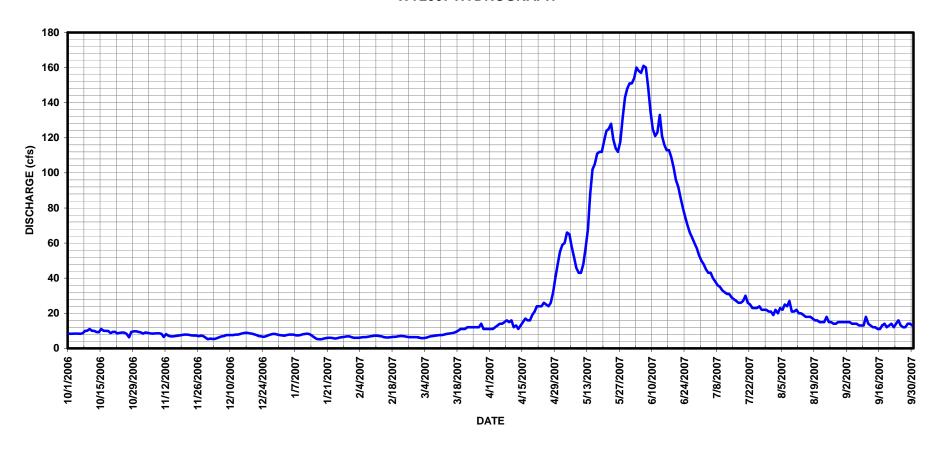
FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

TOTAL 10174 MEAN

161 MIN

5.2 AC-FT

## 08240500 TRINCHERA CREEK ABOVE TURNERS RANCH NEAR FORT GARLAND CO WY2007 HYDROGRAPH



#### 08241000 TRINCHERA CREEK ABOVE MOUNTAIN HOME RESERVOIR, CO

LOCATION.--Lat 37°23'41", long 105°22'09", SW4NE4 sec. 31, T.31 S., R.71 W., (unsurveyed) Costilla County, Hydrologic Unit 13010002, on right bank 150 ft downstream from bridge, 1000 ft upstream from Mountain Home Reservoir, and 5 mi southeast of Ft. Garland, Co.

DRAINAGE AREA. -- 57 mi<sup>2</sup>.

GAGE.-- The primary record is generated by an electronic data logger with satellite transmitter, which recordsgage-height data from a float-operated shaft encoder in a 4-ft. diameter corrugated metal shelter and well. A graphic water-stage recorder is operated as a data backup.

REMARKS.--Record is complete and reliable, except for Nov. 16, 17, 20-30, Dec. 1-7, 2006, April 18, 19, May 3, 4, 2007, when the inlets were plugged. Stage-discharge relation was affected by ice Dec. 8-31, 2006, Jan. 1-3, 14-21, Feb. 2, 2007. Control was submerged from backwater Oct. 4-20, 2006, May 2 to Aug. 21, 2007 from beaver dams below the control and deposition of sediment. Record is good, except for periods of no gage-height, ice affected, and backwater affected record, which are fair to poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

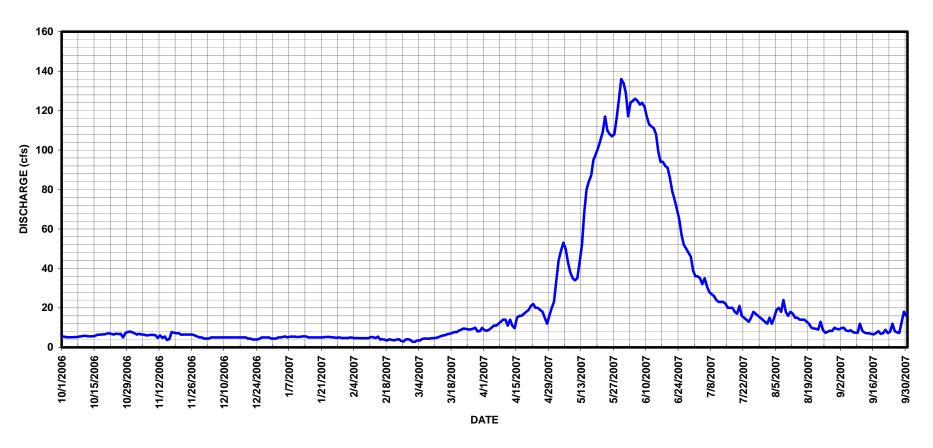
RATING TABLE. -- TRIMTNCO07 USED FROM 01-OCT-2006 TO 30-SEP-2007

			220011		ME	CAN VALUE	IS	10 02112				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	7.1	4.5	4.5	4.7	2.8	8.7	23	129	36	12	9.2
2	5.3	6.5	4.5		5.0	2.8	8.4	34	117	36	15	9.7
3	5.1	6.9	4.5		4.9	3.6	9.0	44	124	35	12	10
4	5.1	6.5	5.0		4.7	3.4	10	49	125	32	15	8.6
5	5.1	6.5	5.0		4.7	4.2	11	53	126	35	19	8.2
6	5.2	6.1	5.0		4.7	4.5	11	50	125	31	20	8.7
7	5.2	6.2	5.0		4.6	4.5	12	43	123	28	18	7.7
8	5.4	6.3	5.0		4.7	4.4	13	38	124	27	24	7.5
9	5.6	6.3	5.0		4.6	4.6	14	35	122	26	18	7.4
10	5.8	6.2	5.0		4.7	4.7	14	34	117	24	16	12
11	5.8	4.8	5.0		5.3	4.8	11	35	113	23	18	8.4
12	5.6	6.1	5.0		5.1	5.1	14	43	112	23	17	7.5
13	5.6	4.8	5.0		4.7	5.6	11	52	111	23	15	7.1
14	5.6	5.5	5.0		5.4	6.0	9.7	68	108	22	15	7.1
15	5.8	3.7	5.0		4.0	6.2	15	80	99	20	14	6.8
16	6.4	4.2	5.0		4.1	6.7	16	84	94	20	14	6.6
17	6.4	7.8	5.0		3.8	6.9	16	87	94	20	14	7.4
18	6.6	7.4	5.0		3.5	7.3	17	95	92	18	13	8.2
19	6.6	7.1	5.0		4.1	7.8	18	98	91	17	12	6.8
20	7.0	7.2	4.5		3.7	7.7	19	101	86	21	10	7.2
21	7.1	6.4	4.5		3.6	8.5	21	105	79	16	9.6	8.9
22	6.8	6.5	4.0		3.9	9.0	22	109	75	15	9.4	7.2
23	6.5	6.5	4.0		4.1	9.6	20	117	70	14	9.0	7.9
24	7.0	6.5	4.0		3.3	9.3	20	110	65	13	13	12
25	6.7	6.5	4.5		2.9	9.1	19	108	57	15	8.9	8.3
26	6.9	6.5	5.0		4.0	9.1	18	107	52	18	7.4	7.6
27	5.0	6.0	5.0		4.1	9.4	15	108	50	17	7.9	7.3
28	7.2	5.5	5.0		3.7	10	12	116	48	16	8.4	13
29	7.8	5.0	5.0			8.1	16	126	46	15	8.3	18
30	8.0	5.0	4.5			8.2	20	136	39	14	10	16
31	7.6		4.5	4.8		9.9		134		13	9.3	
TOTAL	191.3	183.6	148.0	158.8	120.6	203.8	440.8	2422	2813	683	412.2	268.3
MEAN	6.17	6.12	4.77	5.12	4.31	6.57	14.7	78.1	93.8	22.0	13.3	8.94
AC-FT	379	364	294	315	239	404	874	4800	5580	1350	818	532
MAX	8.0	7.8	5.0		5.4	10	22	136	129	36	24	18
MIN	5.0	3.7	4.0	4.5	2.9	2.8	8.4	23	39	13	7.4	6.6
CAL YR	2006	TOTAL	1919	MEAN	5.26 MAX	1	1 MIN	1.6	AC-FT	3810		
WTR YR	2007	TOTAL	8045.4	MEAN	22 MAX	13	86 MIN	2.8	AC-FT	15960		

MAX DISCH: 144 CFS AT 01:15 ON Jun. 1, 2007 GH 3.15 FT. SHIFT 'c' (-1.31) FT. MAX GH: 3.15 FT. AT 01:15 ON Jun. 1, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08241000 TRINCHERA CREEK ABOVE MOUNTAIN HOME RESERVOIR CO WY2007 HYDROGRAPH



#### 08241500 SANGRE DE CRISTO CREEK NEAR FORT GARLAND, CO

LOCATION.--Lat 37°25'30", long 105°24'52", Costilla County, Hydrologic Unit 13010002, in Sangre de Cristo Grant, on left bank at ice house road bridge, 2,200 ft upstream from Garland Canal, 1.0 mi east of Fort Garland, and 6.3 mi upstream from Ute Creek.

DRAINAGE AREA. -- 190 mi<sup>2</sup>.

GAGE. -- The primary record is an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a 48-inch diameter CMP shelter and well. A graphic waterstage recorder is operated as a data backup. Elevation of gage is 7,900 ft, from topographic map.

REMARKS.--Record is complete and reliable, except for Jan. 16-27, 2007, when the the floats were frozen in the well. Stage-discharge relation was affected by ice Nov, 30, Dec. 1-5, 8, 9, 12, 13, 20-26, 31, 2006, Jan. 1-4, 6, 7, 9, 12-15, 28-31, Feb. 1-28, Mar. 1-5, 2007. Stage-discharge relation was affected by backwater at the gage caused by beaver dams below the gage Oct. 2-13, 2006, Sep. 10-14, 18-22, 2007. Record is good, except for periods of no gage-height, ice affected, and backwater affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

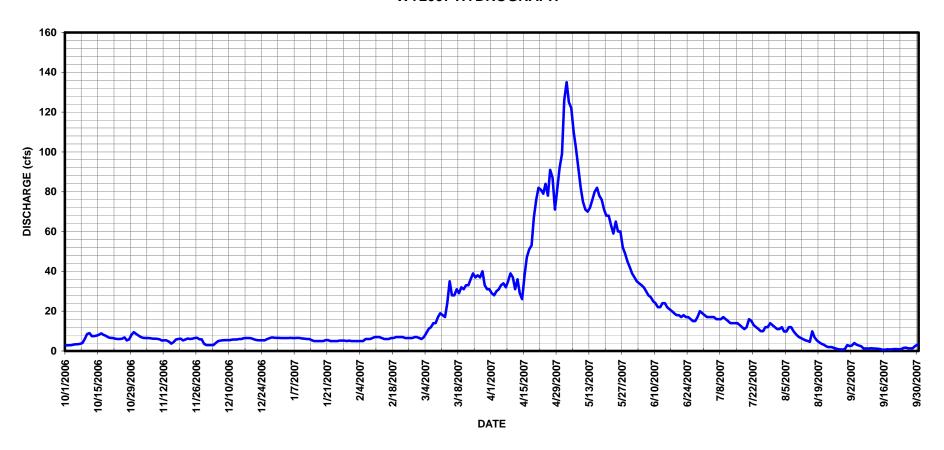
RATING TABLE. -- SANFTGCO18 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCH	ANOD, IN C	ME	AN VALUE		TO SELTE	INDDIK 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	7.7			5.0	6.5	29	99	37	18	11	2.5
2	2.9	7.0			5.0	6.0	28	126	35	17	11	2.7
3	2.9	6.6	3.0		5.0	7.0	30	135	34	17	12	4.0
4	3.1	6.5		6.5	5.0	9.0	31	125	33	17	9.8	3.1
5	3.4	6.5			5.0	11	33	122	32	17	9.8	2.7
6	3.4	6.4			6.0	12	34	110	30	16	12	2.3
7	3.6	6.2			6.0	14	32	102	28	16	12	1.2
8	4.0	6.2			6.0	14	35	92	27	16	10	1.3
9	6.0	6.1			6.5	17	39	82	25	17	8.5	1.2
10	8.5	5.9			7.0	19	37	75	24	16	7.3	1.4
11	9.0	5.2			7.0	18	31	71	22	15	6.6	1.3
12	7.5	5.4			7.0	17	36	70	22	14	6.0	1.2
13	7.5	5.3			6.5	24	29	72	24	14	5.4	1.1
14	7.7	4.7			6.0	35	26	76	24	14	5.1	1.0
15	8.1	3.7			6.0	28	38	80	22	14	4.6	.64
16	8.8	4.5			6.0	28	47	82	21	13	9.9	.63
17	8.1	5.8			6.5	31	51	78	20	12	6.9	.79
18	7.6	6.0			6.5	29	53	76	19	11	5.3	.80
19	6.9	6.2			7.0	32	67	71	18	12	4.3	.80
20	6.6	5.3			7.0	31	76	68	18	16	3.6	1.0
21	6.5	5.8			7.0	33	82	68	17	15	3.1	1.0
22	6.2	6.3			7.0	33	81	63	18	13	2.3	.90
23	6.0	6.0			6.5	36	79	59	17	12	1.9	.89
24	6.0	6.2			6.5	39	84	65	17	11	2.0	1.5
25	6.2	6.5			6.5	37	78	60	16	10	1.7	1.7
26	6.8	6.7			6.5	38	91	60	15	10	1.3	1.4
27	5.3	5.9			7.0	37	87	52	15	12	.88	1.3
28	5.9	5.9			7.0	40	71	49	17	12	.83	1.4
29	8.2	3.6				33	81	45	20	14	.75	2.5
30	9.5	3.0				31 31	92	42 39	19	13	1.0	3.1
31	8.5		6.6	5.0		31		39		12	3.0	
TOTAL	193.5	173.1	172.5	175.5	176.0	776.5	1608	2414	686	436	179.86	47.35
MEAN	6.24	5.77	5.56	5.66	6.29	25.0	53.6	77.9	22.9	14.1	5.80	1.58
AC-FT	384	343			349	1540	3190	4790	1360	865	357	94
MAX	9.5	7.7	6.8	6.6	7.0	40	92	135	37	18	12	4.0
MIN	2.8	3.0	3.0	5.0	5.0	6.0	26	39	15	10	.75	.63
CAL YR	2006	TOTAL	1824.8	MEAN	5.0 MAX	1:	9 MIN	0.20	AC-FT	3620		
WTR YR		TOTAL	7038.31		19.3 MAX		5 MIN		AC-FT	13960		

MAX DISCH: 143 CFS AT 16:30 ON May. 2, 2007 GH 3.23 FT. SHIFT -0.22 FT. MAX GH: 3.23 FT. AT 16:30 ON May. 2, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08241500 SANGRE DE CRISTO CREEK NEAR FORT GARLAND CO WY2007 HYDROGRAPH



#### 08242500 UTE CREEK NEAR FORT GARLAND, CO

LOCATION.--Lat 37°26'50", long 105°25'33", Costilla County, Hydrologic Unit 13010002, in Sangre de Cristo Grant, on left bank 2,300 ft upstream from Newton ditch, 1.4 mi north of Fort Garland, and 5.7 mi upstream from mouth.

DRAINAGE AREA AND PERIOD OF RECORD.--32 mi<sup>2</sup>. Staff gage established on weir Mar. 1915 and operated to Oct. 1916. Continuous record from May 1923 to present at various locations close to present site.

GAGE. -- Graphic water-stage recorder, shaft encoder, and a Sutron satellite monitoring system in a 4-ft. diameter CMP shelter and well. Shaft encoder data used for the primary record. Elevation of gage is 8,045 ft, from topographic map.

REMARKS.--Record is complete and reliable, except for Dec. 7, 2006 through Mar. 23, 2007, when the station was closed for the winter; and November 29, 30, December 1-6, 2006, when the well was frozen. Stagedischarge relation was affected by ice Nov. 14-28, 2006. Record is good, except for periods of no gage-height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

RATING TABLE. -- UTEFTGCO17 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCH	ARGE, IN C	FS, WATER Y	EAR OCTO		TO SEPTE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	14	8.4	5.6	6.4	9.4	13	56	68	28	31	13
2	18	14	8.4	5.4	6.4	9.2	13	64	73	26	31	14
3	17	14	8.6	5.6	6.6	9.2	13	59	77	24	30	13
4	17	13	8.6	5.8	6.8	9.6	13	56	76	22	37	13
5	17	14	8.8	5.8	7.4	9.6	14	47	77	28	39	14
6	18	13	9.0	5.8	7.4	9.6	14	42	75	22	34	14
7	18	13	9.0	6.0	7.8	9.8	14	38	61	21	30	13
8	24	13	9.0	6.2	8.2	9.8	17	35	49	33	25	13
9	23	13	9.0	6.4	8.4	10	18	30	51	24	22	12
10	23	12	9.0	6.6	8.4	10	17	29	56	21	20	13
11	22	10	9.0	6.6	8.8	10	14	32	65	21	20	13
12	22	12	9.0	6.6	8.6	10	15	38	77	19	20	12
13	21	9.6	9.4	6.4	8.2	12	14	54	83	18	19	12
14	21	9.5	9.6	5.8	7.6	13	18	64	62	18	21	11
15	27		9.8		7.4		19	70	63	19	18	9.9
16	26	9.6	9.8		7.6	13	21	68	65	18	19	9.0
17	25	9.6			8.2	13	22	62	65	17	19	11
18	24	9.8	9.2		8.6	13	21	62	65	18	17	13
19	22	9.8	9.0		8.8	13	23		59	34	16	12
20	21	9.8	8.5		9.0	13	22	67	54	96	16	12
21	20	9.8	7.5		9.2	13	23		51	39	15	14
22	19	9.8	7.0		9.4	13	22	69	49	29	14	13
23	19	9.8	6.6		9.4	13	20	63	47	29	14	12
24	18	9.8	6.4		9.4	13	20	62	46	24	13	16
25	17	9.6			9.4	14	25	59	42	22	13	14
26	17	9.6			9.6	16	29	55	37	23	13	14
27	17	9.4	6.8		9.7	17	29	60	37	23	12	13
28	17	9.0		6.6	9.6	16	32	70	37	25	12	15
29	16	8.6				14	40	75	39	25	13	19
30	16	8.4	6.2			14	48	71	32			22
31	15		5.8	6.6		14		68		25	14	
TOTAL	615	326.0	253.6	184.6	232.3	376.2	623	1765	1738	815	631	398.9
MEAN	19.8	10.9	8.18			12.1		56.9	57.9	26.3	20.4	13.3
AC-FT	1220	647	503	366		746	1240	3500	3450	1620	1250	791
MAX	27	14	9.8		9.7	17		75	83	96	39	22
MIN	15	8.4	5.8	5.0	6.4	9.2	13	29	32	17	12	9.0
	2006		4152.5		11.4 MAX		34 MIN		AC-FT			

MAX DISCH: 173 CFS AT 03:15 ON Jul. 20, 2007 GH 2.99 FT. GH CORR. 0.01 FT. SHIFT -0.01 FT. MAX GH: 3.00 FT. (GH CORR. 0.01 FT. APPLIED) AT 03:15 ON Jul. 20, 2007

21.8 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

7958.6 MEAN

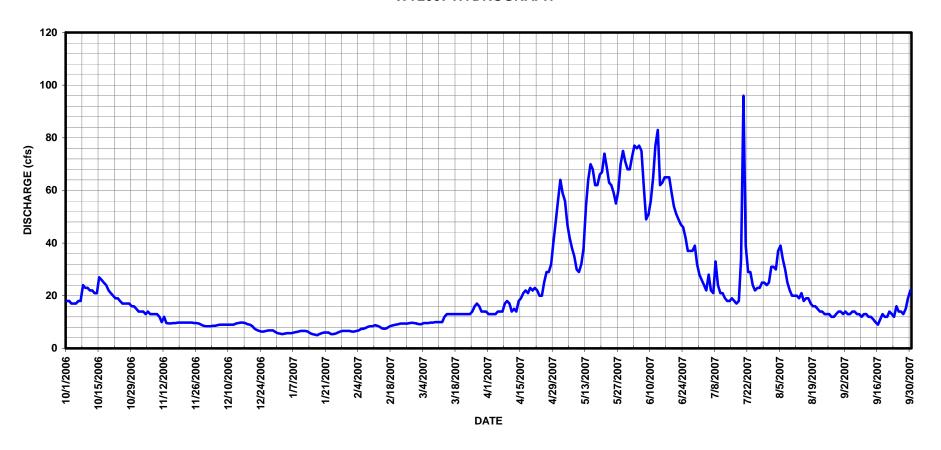
WTR YR 2007

TOTAL

96 MIN

5 AC-FT

## 08242500 UTE CREEK NEAR FORT GARLAND CO WY2007 HYDROGRAPH



#### 08243500 TRINCHERA CREEK BELOW SMITH RESERVOIR, NEAR BLANCA, CO

LOCATION.--Lat 37°23'10", long 105°33'02", in sec. 4, T.31 S., R.73 W., (unsurveyed), Costilla County, Hydrologic Unit 13010002, on right bank 150 ft downstream from bridge, 0.75 mi downstream from Smith Reservoir, and 5.0 mi southwest of Blanca, Co.

DRAINAGE AREA. -- 396 mi<sup>2</sup>.

GAGE.--Primary record is generated by an electronic data logger with satellite transmitter, which records gageheight data from a float-operated shaft encoder in a 42-inch diameter corrugated metal shelter and well. A graphic water-stage recorder is operated as a data backup. Elevation of gage is 7,700 ft, estimated from nearby U.S. Coast and Geodetic Survey level lines.

REMARKS.--Record is complete and reliable, except for January 18-30, February 1 - March 23, 2007, when the well was frozen. Stage-discharge relation was affected by ice December 29-30, 2006. Record is good, except for periods of no gage height and ice affected record, which are fair. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

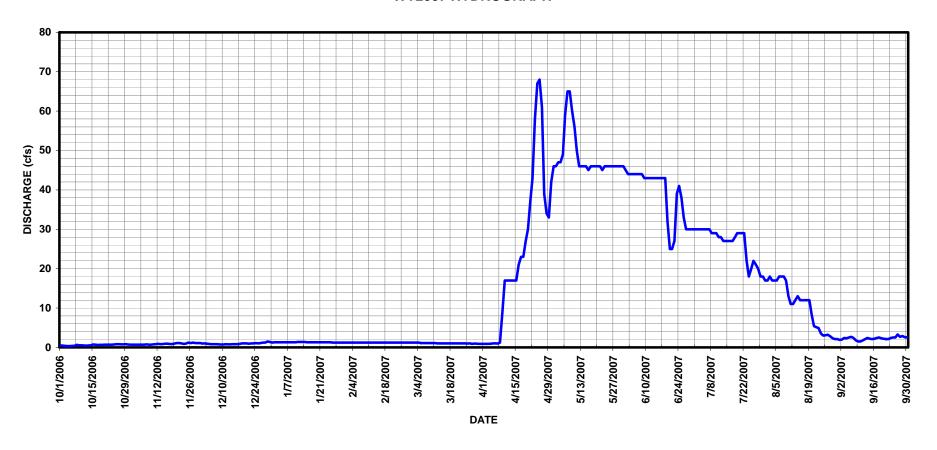
RATING TABLE. -- TRISMICO11 USED FROM 01-OCT-2006 TO 30-SEP-2007

MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	.71	.97	1.3	1.2	1.2	.91	46	45	30	17	1.9
2	.44	.71	1.0	1.3	1.2	1.2	.91	46	44	30	18	2.0
3	.38	.71		1.3	1.2	1.2	.91	47	44	30	17	2.4
4	.31	.71	.85	1.3	1.2	1.2	.92	47	44	30	17	2.3
5	.32	.70	.81	1.3	1.2	1.1	1.0	49	44	30	17	2.5
6	.38	.70			1.2	1.1	1.0	59	44	30	18	2.7
7	.41	.76	.81	1.3	1.2	1.1	.99	65	44	30	18	2.4
8	.63	.71	.76	1.3	1.2	1.1	1.2	65	44	29	18	1.8
9	.53	.71	.73	1.3	1.2	1.1	8.8	60	43	29	17	1.5
10	.52	.79	.73	1.3	1.2	1.1	17	56	43	29	13	1.5
11	.48	.81	.83	1.4	1.2	1.1	17	50	43	28	11	1.8
12	.46	.88	.77	1.4	1.2	1.0	17	46	43	28	11	2.1
13	.47	.81	.76	1.4	1.2	1.0	17	46	43	27	12	2.4
14	.54	.85	.80	1.4	1.2	1.0	17	46	43	27	13	2.2
15	.72	.92	.81	1.3	1.2	1.0	17	46	43	27	12	2.1
16	.69	.92	.81	1.3	1.2	1.0	21	45	43	27	12	2.2
17	.62	.86	.91	1.3	1.2	1.0	23	46	43	27	12	2.4
18	.65	.86	1.0	1.3	1.2	1.0	23	46	43	28	12	2.5
19	.63	.98	1.0	1.3	1.2	1.0	27	46	32	29	12	2.3
20	.71	1.1	1.0	1.3	1.2	1.0	30	46	25	29	8.5	2.2
21	.71	1.1	.94	1.3	1.2	1.0	37	46	25	29	5.4	2.1
22	.71	1.0	1.0	1.3	1.2	1.0	43	45	27	29	5.1	2.1
23	.70	.91	1.0	1.3	1.2	1.0	58	46	39	22	4.9	2.4
24	.75	.98	1.1	1.3	1.2	1.0	67	46	41	18	3.5	2.5
25	.83	1.2	1.0	1.3	1.2	.99	68	46	38	20	3.0	2.5
26	.82	1.1	1.1	1.2	1.2	1.0	61	46	33	22	3.1	3.3
27	.78	1.2	1.2	1.2	1.2	.91	39	46	30	21	3.2	2.7
28	.76	1.1	1.2	1.2	1.2	.98	34	46	30	20	2.8	2.9
29	.81	1.1	1.5	1.2		.95	33	46	30	18	2.3	2.6
30	.73	1.1	1.4			.91	42	46	30	18	2.1	2.5
31	.71		1.2	1.2		.90		46		17	2.1	
TOTAL	18.67	26.99		40.1	33.6	32.14	724.64	1508	1163	808	323.0	68.8
MEAN	.60	.90		1.29	1.20	1.04	24.2	48.6	38.8	26.1	10.4	2.29
AC-FT	37	54		80	67	64	1440	2990	2310	1600	641	136
MAX	.83	1.2		1.4	1.2	1.2	68	65	45	30	18	3.3
MIN	.31	.70	.73	1.2	1.2	.90	.91	45	25	17	2.1	1.5
CAL YR	2006	TOTAL	1031.03	MEAN	2.8 MAX		.1 MIN		AC-FT	2050		
WTR YR	2007	TOTAL	4776.66	MEAN	13.1 MAX		68 MIN	.31	AC-FT	9470		

MAX DISCH: 70.8 CFS AT 16:15 ON May. 8, 2007 GH 3.79 FT. SHIFT 0.10 FT. MAX GH: 3.79 FT. AT 16:15 ON May. 8, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08243500 TRINCHERA CREEK BELOW SMITH RESERVOIR NEAR BLANCA CO WY2007 HYDROGRAPH



#### 08245000 CONEJOS RIVER BELOW PLATORO RESERVOIR, CO

LOCATION.--Lat 37°21'18", long 106°32'37", Conejos County, Hydrologic Unit 13010005, on left bank 1,100 ft downstream from valve house for Platoro Reservoir and 0.7 mi northwest of Platoro.

DRAINAGE AREA AND PERIOD OF RECORD.--40 mi<sup>2</sup>. 1937 - 1953 at site one mile downstream. May 1952 to current year at present site.

GAGE. -- Primary record is generated by an electronic data logger with satellite transmitter, which records gageheight data from a float-operated shaft encoder in a timber shelter and concrete well. A graphic waterstage recorder is operated as a data backup. The station is also equipped with an air temperature sensor. The control is a concrete weir with sloping sides. Datum of gage is 9,866.60 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record is complete and reliable, except for November 6, 2006 through March 30, 2007, when the station was closed for the winter. Record is good, except for period of no gage-height record, which is fair. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

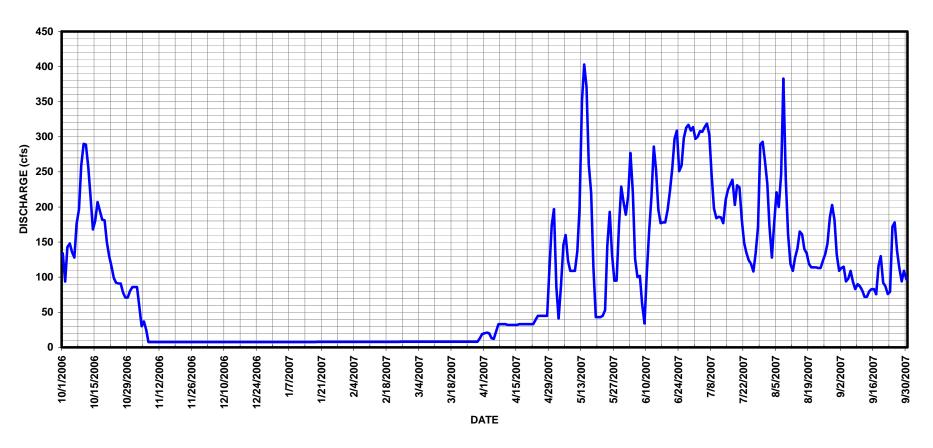
RATING TABLE. -- CONPLACO13 USED FROM 01-OCT-2006 TO 30-SEP-2007

MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	86	7.5	7.6	7.7	7.9	20	197	189	297	233	109
2	94	86	7.5	7.6	7.7	7.9	21	86	216	300	172	113
3	143	59	7.5	7.6	7.7	7.9	20	41	277	308	128	115
4	148	30	7.5	7.6	7.7	7.9	13	88	221	307	176	94
5	136	37	7.5	7.6	7.7	7.9	12	146	126	314	221	98
6	128	25	7.5	7.6	7.8	7.9	23	160	100	319	200	109
7	176	7.5	7.5	7.6	7.8	7.9	33	123	102	303	247	93
8	197	7.5	7.5	7.6	7.8	7.9	33	109	62	247	383	83
9	259	7.5	7.5	7.6	7.8	7.9	33	109	34	198	239	90
10	290	7.5	7.5	7.6	7.8	7.9	33	109	105	184	162	87
11	289	7.5	7.5	7.6	7.8	7.9	32	137	166	186	119	81
12	257	7.5		7.6	7.8	7.9	32	199	213	185	109	72
13	215	7.5	7.5	7.6	7.8	8.0	32	351	286	177	128	72
14	168	7.5	7.5	7.6	7.8	8.0	32	403	253	210	141	80
15	180	7.5	7.5	7.6	7.8	8.0	32	371	196	224	165	83
16	207	7.5	7.5	7.6	7.8	8.0	33	261	177	232	161	83
17	195	7.5	7.5	7.6	7.8	8.0	33	220	178	239	140	76
18	182	7.5	7.5	7.6	7.8	8.0	33	114	178	203	134	116
19	181	7.5	7.5	7.7	7.8	8.0	33	43	196	231	119	130
20	150	7.5	7.5	7.7	7.8	8.0	33	43	222	228	114	92
21	130	7.5	7.5	7.7	7.8	8.0	33	43	255	183	114	87
22	116	7.5	7.5	7.7	7.8	8.0	33	45	297	149	114	76
23	99	7.5	7.5	7.7	7.8	8.0	39	53	309	135	113	79
24	92	7.5	7.5	7.7	7.9	8.0	45	145	251	124	113	172
25	91	7.5	7.5	7.7	7.9	8.0	45	193	259	119	123	178
26	91	7.5	7.5	7.7	7.9	8.0	45	134	298	108	133	137
27	78	7.5	7.5	7.7	7.9	8.0	45	95	313	134	148	113
28	71	7.5	7.5	7.7	7.9	8.0	45	95	317	172	185	94
29	71	7.5	7.5	7.7		8.0	109	174	309	289	203	109
30	80	7.5	7.5	7.7		13	174	229	314	293	181	97
31	86		7.5	7.7		19		207		266	132	
TOTAL	4734	503.0			218.4	262.8	1179	4723	6419	6864	5050	3018
MEAN	153	16.8			7.80	8.48	39.3	152	214	221	163	101
AC-FT	9390	998			433	521	2340	9370	12730	13610	10020	5990
MAX	290	86			7.9	19	174	403	317	319	383	178
MIN	71	7.5	7.5	7.6	7.7	7.9	12	41	34	108	109	72
CAL YR	2006	TOTAL	31143.5	MEAN	85.3 MAX	532	MIN	7.0	AC-FT	61770		
WTR YR	2007	TOTAL	33440.6	MEAN	91.6 MAX	403	MIN	7.5	AC-FT	66330		

MAX DISCH: 440 CFS AT 15:45 ON Aug. 8, 2007 GH 2.72 FT. SHIFT 0 FT. MAX GH: 2.72 FT. AT 15:45 ON Aug. 8, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## 08245000 CONEJOS RIVER BELOW PLATORO RESERVOIR CO WY2007 HYDROGRAPH



#### 08246500 CONEJOS RIVER NEAR MOGOTE, CO

 $\textbf{LOCATION.} -- \texttt{Lat } 37°03'14", \texttt{long } 106°11'13", \texttt{in } \texttt{SE} \frac{1}{4} \texttt{Sec.} \quad 34, \texttt{T.33 N., R.7 E., Conejos County, Hydrologic United Control County}, \texttt{Hydrologic United County}, \texttt{$ 13010005, on left bank 75 ft downstream from bridge on State Highway 174, 0.4 mi downstream from Fox Creek, 5.3 mi west of Mogote, and 10 mi west of Antonito.

DRAINAGE AREA AND PERIOD OF RECORD.--282 mi². Intermittent, non-recording data from 1903-1915 at various sites. Water stage recorder from 1915-Oct. 1988 at different site. Oct. 1988-present, water stage recorder at current site.

GAGE. -- Primary record is generated by an electronic data logger with satellite transmitter and phone modem, which records gage-height data from a float-operated shaft encoder in a 5 ft. diameter metal shelter and well. A graphic water-stage recorder is operated as a data backup. Station is also equipped with an air temperature sensor and a tipping bucket rain gage. Datum of gage is 8,271.54 ft, Colorado State Highway datum.

REMARKS.--Record is complete and reliable. Stage-discharge relation was affected by ice Nov. 25, 2006 through Mar. 6, 2007. Record is good, except for periods of ice-affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- CONMOGCO12 USED FROM 01-OCT-2006 TO 30-SEP-2007

					M	EAN VALUE	S					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	294	219	44	52	46	44	166	759	1130	502	450	185
2	287	216	44	56	44	44	179	818	1190	468	352	204
3	248	212	43	60	44	44	208	686	1270	465	288	193
4	302	173	47	60	45	50	244	697	1190	458	301	186
5	298	152	50	58	47	66	275	656	1100	464	414	170
6	298	155	52	56	49	72	285	596	1120	457	372	177
7	646	138	52	56	51	91	330	536	866	449	363	168
8	708	121	52	54	52	98	326	474	700	409	506	146
9	676	119	50		53	103	309	448	652	350	461	141
10	735	111	48		53	108	323	472	714	311	309	177
11	680	93	47		53	115	272	557	906	312	264	157
12	632	109	46		53	126	265	717	1100	310	241	145
13	556	91	52		52	159	246	938	1080	312	220	131
14	488	97	54		50	193	213	1270	1040	302	246	129
15	574	78	58		50	214	237	1360	951	336	240	133
16	579	97	60		48	230	255	1270	859	337	266	132
17	560	109	56		48	249	242	1200	794	336	250	146
18	482	101	54		50	279	240	1060	834	328	222	193
19	467	94	54		50	283	250	893	761	315	210	200
20	454	90	50		50	255	254	993	732	364	188	192
21	390	88	47		50	260	275	929	701	329	182	166
22	354	86	47		50	231	250	994	697	275	175	165
23	321	85	46		48	225	265	887	692	249	171	146
24	295	81	46		46	202	270	785	639	226	173	241
25	282	80	45		44	184	255	803	579	210	169	285
26	276	76	48		44	188	271	771	579	213	177	230
27	253	68	52		44	201	299	754	572	250	189	202
28	244	64	56		44	222	380	892	562	300	217	186
29	231	52	54			184	483	1060	538	402	249	195
30	223	42	54			176	664	1210	513	501	262	199
31	226		52	46		167		1150		447	239	
TOTAL	13059	3297	1560	1590	1358	5063	8531	26635	25061	10987	8366	5320
MEAN	421	110	50.3	51.3	48.5	163	284	859	835	354	270	177
AC-FT	25900	6540	3090	3150	2690	10040	16920	52830	49710	21790	16590	10550
MAX	735	219	60	60	53	283	664	1360	1270	502	506	285
MIN	223	42	43	44	44	44	166	448	513	210	169	129
CAL YR		TOTAL	97635		267 MAX		0 MIN		AC-FT	193700		
F.7000 110	0007	moma r	110007	3.455.3.3.7	201 1577	1 0 /	0 14737	4.0	30 55	010000		

MAX DISCH: 1420 CFS AT 04:30 ON May. 15, 2007 GH 4.53 FT. SHIFT 0.02 FT. MAX GH: 4.53 FT. AT 04:30 ON May. 15, 2007

304 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

110827 MEAN

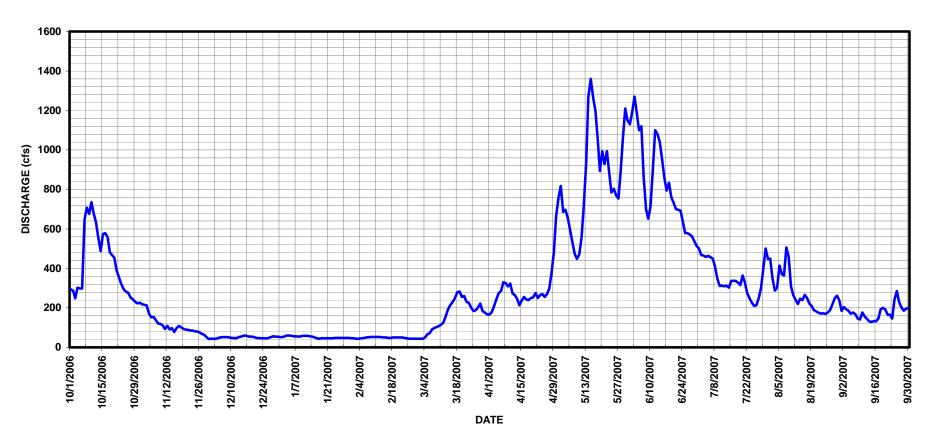
WTR YR 2007

TOTAL

1360 MIN

42 AC-FT

## 08246500 CONEJOS RIVER NEAR MOGOTE CO WY2007 HYDROGRAPH



#### 08247500 SAN ANTONIO RIVER AT ORTIZ, CO

LOCATION.--Lat 36°59'35", long 106°02'17", in NE4SE4 sec. 24, T.32 N., R.8 E., Rio Arriba County, New Mexico, Hydrologic Unit 13010005, on left bank 800 ft south of Colorado-New Mexico State line, 0.4 mi southeast of Ortiz, and 0.4 mi upstream from Los Pinos River.

DRAINAGE AREA AND PERIOD OF RECORD.--110 mi². April 1919 to Oct. 1920, Oct. 1924 to current year(no winter record prior to 1941). Monthly data only for some periods.

GAGE.--Primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a 42-inch metal pipe shelter and well. A graphic water-stage recorder is operated as a data backup. Elevation of gage is 7,970 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record is complete and reliable, except for Jan. 17 through Mar. 15, 2007, when the well and oil cylinder were frozen. The stage-discharge relation was affected by ice November 13, 2006 through Jan. 16, 2007, Mar. 16 - 19, and Apr. 14, 2007. There was no flow Jul. 7 - 13, Aug. 25 - Sep. 2, Sep. 18 - 20, 2007 (19 days). Record is good, except for periods of no gage height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- SANORTCO14 USED FROM 01-OCT-2006 TO 30-SEP-2007

					М	EAN VALUE	ES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	4.7	1.6	2.6	2.7	4.0	37	141	14	.19	2.3	0
2	3.4	4.3	1.6	2.8	2.6	4.0	50	162	12	.33	1.5	0
3	3.2	4.5	1.6	3.0	2.6	3.9	65	157	12	.31	1.2	.22
4	3.2	4.3	1.9	3.0	2.6	3.8	73	138	12	.21	.97	.26
5	3.2	4.4	2.2	2.8	2.8	3.8	90	110	12	.10	1.5	.28
6	3.3	4.2	2.4	2.6	3.0	3.9	96	94	9.6	.03	3.0	.80
7	3.7	4.3	2.4	2.6	3.2	4.2	99	80	7.9	0	3.0	1.8
8	5.8	4.6	2.4	2.4	3.6	5.0	104	73	7.1	0	3.4	1.2
9	8.5	4.6	2.3	2.6	3.8	7.0	96	72	6.8	0	1.7	1.1
10	9.1	4.4	2.3	2.8	4.2	9.0	95	66	7.5	0	1.3	.93
11	9.0	4.0	2.2	2.8	4.6	11	67	65	8.2	0	.98	.49
12	7.6	3.1	2.2	2.8	4.8	12	65	64	9.1	0	1.1	1.8
13	6.3	2.8	2.3	2.8	5.0	20	49	61	9.7	0	1.4	1.6
14	5.6	2.5	2.4	2.8	4.8	30	44	64	6.7	1.8	1.1	.91
15	5.8	2.4	2.4	2.8	4.7	65	63	61	5.7	1.9	.84	.29
16	7.8	2.6	2.6	2.6	4.4	70	72	64	5.0	1.1	1.1	.11
17	7.3	2.9	2.5	2.6	4.2	75	81	57	4.1	.42	2.4	.04
18	6.7	3.2	2.4		4.0	80	96	56	4.2	.19	1.8	0
19	7.2	3.6	2.4	2.8	4.1	80	105	46	3.5	.07	1.3	0
20	6.9	3.4	2.3	2.8	4.2	82	88	41	2.0	.02	.78	0
21	6.8	3.7	2.1		4.3	86	93	47	1.2	5.4	.28	1.2
22	6.2	3.8			4.2	76	75	36	1.1	7.0	.19	5.2
23	5.3	3.7			4.1	85	76	32	1.6	3.5	.08	4.0
24	5.3	3.4			4.0	66	82	35	1.7	1.7	.01	4.5
25	5.6	2.9			4.0	49	76	29	1.3	1.1	0	9.5
26	5.8	2.5			4.0	46	72	27	.97	1.1	0	5.0
27	5.9	2.3			4.0	60	80	24	.97	.83	0	2.9
28	5.7	2.0		2.8	4.1	88	110	21	.57	2.1	0	2.0
29	6.5	1.7				52	116	18	.32	11	0	1.8
30	5.8	1.6				47	137	16	.21	7.2	0	5.4
31	5.3		2.6	2.8		37		15		5.2	0	
TOTAL	181.3	102.4	71.5	85.4	108.6	1265.6	2452	1972	169.04	52.80	33.23	53.33
MEAN	5.85	3.41	2.31	2.75	3.88	40.8	81.7	63.6	5.63	1.70	1.07	1.78
AC-FT	360	203	142	169	215	2510	4860	3910	335	105	66	106
MAX	9.1	4.7	2.8	3.0	5.0	88	137	162	14	11	3.4	9.5
MIN	3.2	1.6	1.6	2.4	2.6	3.8	37	15	.21	0	0	0
CAL YR	2006	TOTAL	2989.13	MEAN	8.19 MAX	9	94 MIN	0	AC-FT	5930		

MAX DISCH: 185 CFS AT 23:45 ON May. 2, 2007 GH 2.94 FT. SHIFT -0.15 FT. MAX GH: 2.94 FT. AT 23:45 ON May. 2, 2007

17.9 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

6547.2 MEAN

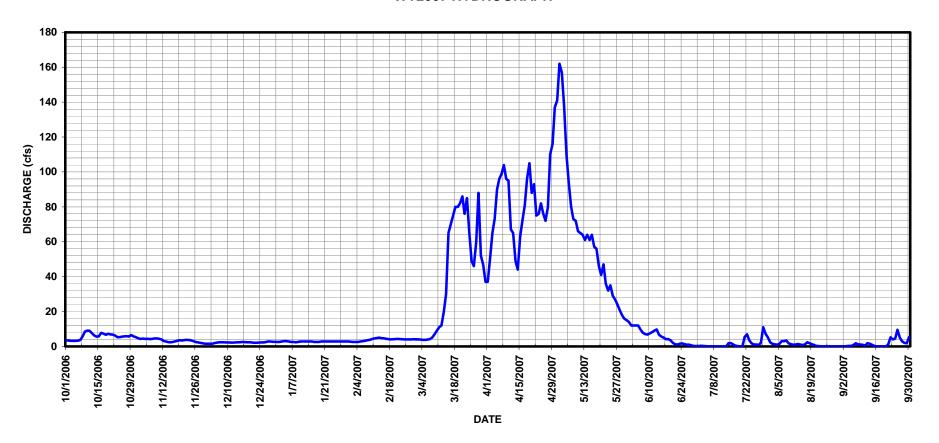
TOTAL

WTR YR 2007

162 MIN

0 AC-FT

## 08247500 SAN ANTONIO RIVER AT ORTIZ CO WY2007 HYDROGRAPH



#### 08248000 LOS PINOS RIVER NEAR ORTIZ, CO

Location.--Lat 36°58'56", long 106°04'23", on line between secs. 26 and 27, T.32 N., R.8 E., Rio Arriba County, New Mexico, Hydrologic Unit 13010005, on left bank 0.9 mi south of Colorado-New Mexico State line, 2.1 mi southwest of Ortiz, and 2.9 mi upstream from mouth.

DRAINAGE AREA AND PERIOD OF RECORD.--167 mi<sup>2</sup>. Jan. 1, 1915 to Apr. 14, 1955, water stage recorder at location 350' upstream. Apr. 15, 1955 relocated to present site.

GAGE.--Primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a 42-inch metal pipe shelter and well. A graphic water-stage recorder is operated as a data backup. Supplemental outside chain gage. Elevation of gage is 8,040 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record is complete and reliable, except for Jan. 8 through Mar. 15, 2007, when the well and oil cylinder were frozen. Stage-discharge relation was affected by ice Nov. 13, 2006 to Jan. 7, 2007 and Mar. 16, 17, 29, Apr. 13, 14, 2007. Record is good except for periods of no gage height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- LOSORTCO13 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DIBCHAL	.OL, IN C.	ME.	AN VALUE		IO SEFIE	INDUIT ZOO7			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	62	29	22	20	29	111	668	343	49	29	21
2	58	62	28	22	19	28	138	797	349	42	26	18
3	58	59	26	24	18	27	182	738	350	39	24	20
4	57	58	27	24	19	26	230	727	331	38	30	20
5	60	56	28	22	19	26	272	562	319	41	32	20
6	61		29	20	20	26	276	444	320	37	27	20
7	115	54	28	20	20	28	302	384	272	36	30	18
8	142	53	27	18	20	32	303	360	228	33	29	16
9	144	51	25	20	20	38	271	346	218	31	27	14
10	161	47	26	22	21	44	294	389	213	32	25	16
11	154	42	24	22	21	48	229	453	218	30	24	18
12	143	45	22	22	22	52	204	512	263	28	23	15
13	131	35	23	22	22	62	178	590	230	37	21	14
14	115	32	24	20	21	72	178	660	200	31	20	12
15	157	31	25	18	21	82	170	672	179	28	20	11
16	155	32	26	16	20	87	197	603	164	29	19	11
17	137		24	16	19	99	208	591	153	26	21	11
18	136	33	23	16	20	134	241	536	141	27	19	29
19	132	32	23	18	21	182	263	446	128	31	16	15
20	129	32	22	20	22	194	250	544	82	37	15	17
21	126	32	22	20	24	193	280	524	134	51	14	24
22	111	32	22	20	26	179	241	509	105	36	12	19
23	106	31	22	20	28	177	251	461	90	36	12	17
24	102	32	22	20	28	144	269	404	81	28	12	33
25	98	31	21	22	28	125	233	356	74	25	12	23
26	101	30	22	22	29	129	260	337	66	28	12	19
27	68	30	23	22	29	160	329	323	60	43	16	17
28	70	32	24	22	29	195	434	337	59	37	18	17
29	66	30	23	22		149	503	359	56	38	17	22
30	63	26	22	22		129	634	366	54	47	17	22
31	64		22	22		115		348		36	20	
TOTAL	3278	1210	754	638	626	3011	7931	15346	5480	1087	639	549
MEAN	106	40.3	24.3	20.6	22.4	97.1	264	495	183	35.1	20.6	18.3
AC-FT	6500	2400	1500	1270	1240	5970	15730	30440	10870	2160	1270	1090
MAX	161	62	29	24	29	195	634	797	350	51	32	33
MIN	57	26	21	16	18	26	111	323	54	25	12	11
CAL YR		TOTAL	27084 N		74.2 MAX	4.4	18 MIN		AC-FT	53720		

MAX DISCH: 951 CFS AT 00:15 ON May. 4, 2007 GH 5.17 FT. SHIFT -0.07 FT. MAX GH: 5.17 FT. AT 00:15 ON May. 4, 2007

111 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

40549 MEAN

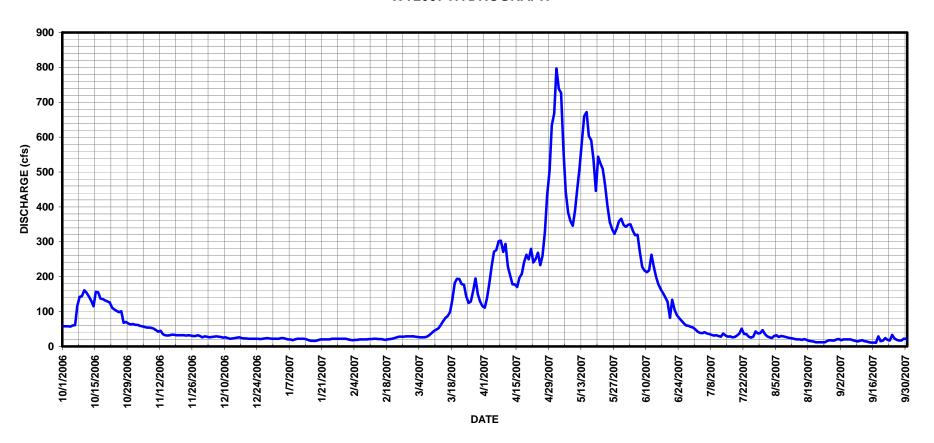
WTR YR 2007

TOTAL

797 MIN

11 AC-FT

## 08248000 LOS PINOS RIVER NEAR ORTIZ CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 08248500 SAN ANTONIO RIVER AT MOUTH, NEAR MANASSA, CO

LOCATION.--Lat 37°10'37", long 105°52'39", in SEMNEM sec. 21, T.34 N., R.10 E., Conejos County, Hydrologic Unit 13010005, on right bank 0.3 mi. downstream from bridge on State Highway 142, 2.2 mi. upstream from mouth, and 3.3 mi. east of Manassa, Co.

DRAINAGE AREA. -- 348 mi<sup>2</sup>.

GAGE.--Primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in metal pipe shelter and well. A graphic water-stage recorder is operated as a data backup. On Sep. 20, 2007, the existing CMP shelter was reset on a new concrete well at same location but further from stream bank. New inlet pipes and valves were installed. Altitude of gage is 7,650 ft. from topographic map.

REMARKS.--Record is complete and reliable, except for Nov. 30, Dec. 1-20, 2006, Mar. 29-31, 2007, when the well was frozen; and Dec. 21, 2006 through March 19, 2007, when the station was closed for the winter. The stage-discharge relation was affected by ice Nov. 15-17, 21, 22, 27-29, 2006, Apr. 12-15, 2007. There was no flow Aug. 3 through Sep. 30, 2007. There was no flow for 59 days. Record is good, except for periods of no gage height and ice affected record, which are poor. Station maintained and record developed by Div. III Hydrographic Staff.

RATING TABLE. -- SANMANCO19B USED FROM 01-OCT-2006 TO 30-SEP-2007

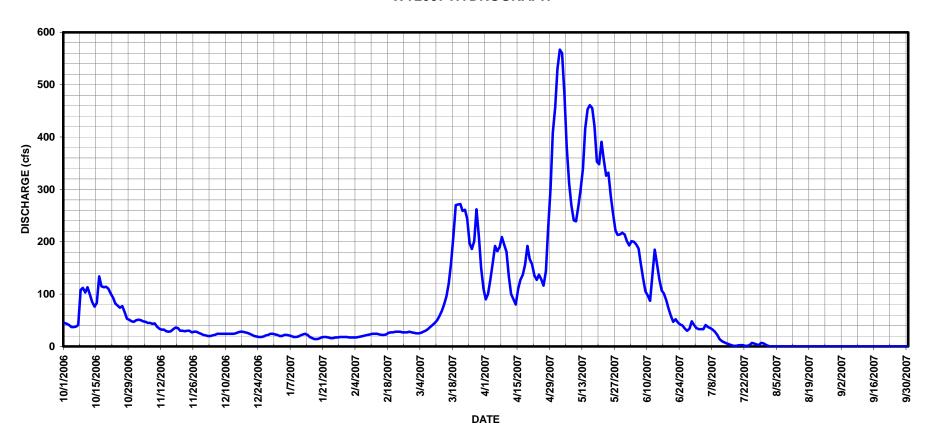
DISCHARGE,	IN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007
			1	MEAN V	/ALUES				

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	50	21	22	17	26	90	457	201	35	.94	0
2	43	51	20	20	17	25	100	530	193	33	.07	0
3	41	50	20	20	17	25	128	567	201	33	0	0
4	37	48	21	22	17	26	158	560	200	33	0	0
5	37	47	22	22	18	28	192	480	195	41	0	0
6	38	45	24	21	19	30	182	381	187	37	0	0
7	41	45	24	20	20	33	190	312	158	35	0	0
8	108	43	24	18	21	37	209	270	129	32	0	0
9	112	44	24	18	22	41	194	241	105	28	0	0
10	103	38	24	19	23	45	181	239	97	22	0	0
11	113	34	24	21	24	50	133	267	87	14	0	0
12	99	32	24	23	24	58	100	299	138	10	0	0
13	85	32	24	24	24	68	90	340	185	7.9	0	0
14	76	29	25	22	23	80	80	416	157	5.7	0	0
15	83	28	27	18	22	96	110	453	129	4.2	0	0
16	134	29	28	16	22	120	127	461	107	2.4	0	0
17	115	33	28	14	23	160	137	455	101	1.2	0	0
18	113	36	27	14	26	210	156	421	88	.93	0	0
19	114	35	26	15	27	270	192	353	72	1.8	0	0
20	110	30	24	17	27	271	167	348	58	2.3	0	0
21	101	30	22	18	28	272	157	391	47	2.3	0	0
22	93	29	20	18	28	259	136	357	52	1.3	0	0
23	82	30	19	17	28	261	127	326	46	.81	0	0
24	78	30	18	16	27	244	137	332	42	2.8	0	0
25	74	27	18	16	27	197	128	287	40	6.6	0	0
26	77	28	19	17	27	186	116	254	34	5.4	0	0
27	66	28	21	17	28	201	144	222	30	3.8	0	0
28	53	26	22	18	27	262	226	213	34	2.9	0	0
29	51	24	24	18		210	302	214	48	6.7	0	0
30	48	22	24	18		150	408	217	41	5.7	0	0
31	47		23	18		110		214		3.2	0	
TOTAL	2417	1053	711	577	653	4051	4797	10877	3202	420.94	1.01	0
MEAN	78.0	35.1	22.9	18.6	23.3	131	160	351	107	13.6	.033	0
AC-FT	4790	2090	1410	1140	1300	8040	9510	21570	6350	835	2.0	0
MAX	134	51	28	24	28	272	408	567	201	41	.94	0
MIN	37	22	18	14	17	25	80	213	30	.81	0	0

CAL YR 2006 TOTAL 16369.47 MEAN 44.8 MAX 309 MIN 0 AC-FT 32470 WTR YR 2007 TOTAL 28759.95 MEAN 78.8 MAX 567 MIN 0 AC-FT 57050

MAX DISCH: 612 CFS AT 14:00 ON May. 4, 2007 GH 5.04 FT. SHIFT 0 FT. MAX GH: 5.04 FT. AT 14:00 ON May. 4, 2007

# 08248500 SAN ANTONIO RIVER AT MOUTH, NEAR MANASSA CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 08249000 CONEJOS RIVER NEAR LASAUSES, MAIN (NORTH) CHANNEL, CO

LOCATION.--Lat 37°18'01", long 105°44'47", in SW4SW4 sec. 2, T. 35 N., R. 11 E., Conejos County, on left bank of main channel 125 ft downstream from bridge on State Route 158, 1.0 mi upstream from mouth, 2.1 mi north of LaSauses, and 13 mi southeast of Alamosa.

DRAINAGE AREA AND PERIOD OF RECORD.--887 mi². Water stage recorder since March 29, 1921 at five sites close to present location.

GAGE.--Primary record is generated by an electronic data logger with satellite transmitter, which records gage-height data from a float-operated shaft encoder in a four foot square timber shelter and well. A graphic water-stage recorder is operated as a data backup. There is a supplementary outside chain gage. Station is also equipped with an air temperature sensor. Datum of gage is 7,495.02 ft above mean sea level (levels by Bureau of Reclamation). At present site and datum since Oct. 1, 1937.

REMARKS.--Record is complete and reliable. Stage-discharge relation was affected by ice Nov. 29, 30, Dec. 1-15, 21-31, 2006; and Jan. 1-31, Feb. 3, 4, 2007. Record good, except for periods of ice affected record, which are fair to poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- NORLASCO15 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	CAN VALUE	ES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	231	88	78	77	105	246	418	102	56	102	42
2	162	254		74	88	90	200	481	90	53	98	34
3	163	261		73	121	89	230	529	93	51	54	37
4	132	259			80	86	231	458	95	47	26	42
5	153	219			77	87	246	436	105	50	16	42
6	151	204			75	96	239	341	99	52	28	41
7	146	203			75	116	211	257	99	48	47	38
8	342	187			78	129	241	186	70	43	71	31
9	451	176			80	141	249	126	46	34	124	21
10	438	166			81	159	193	109	34	43	102	17
11	403	152			85	166	172	114	23	42	48	15
12	356	138			91	171	135	142	22	47	33	23
13	302	145			97	188	168	207	98	45	35	16
14	237	131			101	239	212	314	135	39	28	13
15	241	126		72	94	297	229	366	155	35	26	8.8
16	357	113		70	93	344	241	439	136	37	29	4.2
17	336	136		65	89	398	245	407	111	32	31	3.6
18	311	149		64	89	450	220	352	95	27	32	2.5
19	279 278	140		68	96	506 537	211 176	274 234	82 63	31 35	25	6.1 20
20	262	131 127		70 74	100 105	537	176	234	45	56	17 15	26
21 22	202	127		74	100	519	117	274	45 56	54	12	26 26
23	189	124		76	101	487	92	206	75	51	10	19
24	168	122			101	468	95	210	92	47	12	19
25	176	117			102	404	101	178	79	42	11	37
26	177	117			103	370	69	147	72	33	9.9	67
27	174	113			103	345	67	117	60	35	10	43
28	150	103			110	403	90	100	40	58	12	11
29	138	96		74		446	175	102	73	57	23	7.4
30	130	92		75		350	291	106	75	120	45	5.9
31	142		84	75		305		111		127	49	
31	112		0 1	, 5		303				12,	10	
TOTAL	7333	4654	2754	2253	2597	9005	5503	7975	2420	1527	1180.9	717.5
MEAN	237	155		72.7	92.7	290	183	257	80.7	49.3	38.1	23.9
AC-FT	14550	9230		4470	5150	17860	10920	15820	4800	3030	2340	1420
MAX	451	261		78	121	537	291	529	155	127	124	67
MIN	130	92		64	75	86	67	100	22	27	9.9	2.5
CAL YR	2006	TOTAL	32092.1	MEAN	87.9 MAX	45	51 MIN	2.5	AC-FT	63650		

MAX DISCH: 592 CFS AT 15:30 ON Mar. 20, 2007 GH 4.39 FT. SHIFT 0.06 FT. MAX GH: 4.39 FT. AT 15:30 ON Mar. 20, 2007

131 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

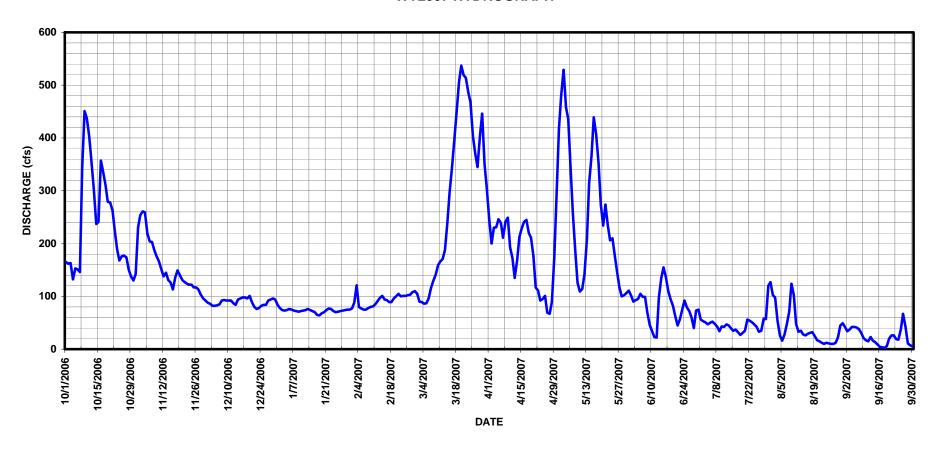
TOTAL 47919.4 MEAN

WTR YR 2007

537 MIN

2.5 AC-FT

# 08249000 CONEJOS RIVER MAIN (NORTH) CHANNEL NEAR LASAUSES CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

08249000 CONEJOS RIVER NEAR LASAUSES, SECONDARY (SOUTH) CHANNEL, CO

LOCATION.-- Lat 37°18'01", long 105°44'47", in SE-4NE-4 sec. 10, T. 35 N., R. 11 E., Conejos County, on left bankof secondary channel 230 ft upstream from bridge on State Route 158, 1.0 mi upstream from mouth, 2.0 mi north of LaSauses, and 13 mi southeast of Alamosa.

DRAINAGE AREA AND PERIOD OF RECORD. -- 887 mi². Water stage recorder since March 29, 1921 at various sites close to present location.

GAGE.--Primary record is generated by an electronic data logger with satellite transmitter, which records gageheight data from a float-operated shaft encoder in a 4-ft. metal pipe shelter and well. A graphic waterstage recorder is operated as a data backup. Datum of gage is 7,496.89 ft above mean sea level (levels by Bureau of Reclamation). At present site and datum since Oct. 14, 1965.

REMARKS.--Record is complete and reliable, except for Jan. 16 to Mar. 15, 2007, when the well and oil cylinder were frozen. Stage-discharge relation was affected by ice Nov. 29, 2006 to Jan. 15, 2007. There was no flow Aug. 23-29, Sep. 18, 19, 2007 (9 days). Due to unstable stage-discharge relation caused by degraded channel and weed growth, record is fair, except for periods of no gage-height, ice affected, and backwater affected record, which are poor. The period of Oct. 8-9, 2006, including the peak flow should also be considered poor, due to lack of measurement in that flow range. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- SOULASCO08 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	7.7	1.8	.52	.66	1.0	1.2	2.0	11	3.5	4.0	4.4	2.8		
2	7.2	3.0	.51	.64	.90	1.2	1.5	16	2.3	3.2	3.9	2.5		
3	6.9	3.2	.50	.64	.90	1.2	1.2	21	1.9	3.7	3.0	2.3		
4	4.8	2.8	.51	.72	.90	1.2	1.6	12	2.0	3.0	1.4	2.6		
5	4.6	2.3	.64	.74	1.0	1.5	2.5	1,1	2.4	3.2	.19	2.7		
6	4.3	2.0	.70	.64	1.1	2.0	3.0	6.8	2.6	3.0	.06	2.3		
7	3.7	1.9	.74	.60	1.2	2.5	3.0	5.9	2.0	2.6	.24	2.4		
8	77	1.9	.70	.64	1.3	3.0	3.5	5.2	2.3	2.1	2.0	1.8		
9	91	1.8	.70	.66	1.4	3.5	3.7	4.2	2.7	1.8	2.9	1.6		
10	11	1.7	.72	.62	1.5	4.0	3.3	3.5	2.6	.52	3.1	1.6		
11	6.3	1.4	.74	.66	1.6	4.5	3.1	3.6	2.0	.33	2.4	1.8		
12	3.6	1.3	.70	.70	1.7	5.0	3.8	4.2	2.3	.26	1.1	2.2		
13	2.8	1.3	.72	.74	1.8	5.4	4.4	5.5	5.1	.32	.55	2.3		
14	2.3	1.3	.78	.76	1.9	5.5	5.0	8.9	5.7	.21	.40	1.9		
15	2.2	.80	.86	.72	2.0	5.6	5.3	14	7.3	.38	.33	1.2		
16	4.5	.76	.92	.70	2.1	10	5.8	21	8.2	.20	.59	.27		
17	5.3	.77	.86	.68	2.1	9.8	6.2	15	6.6	.24	.63	.03		
18	3.2	1.5	.82	.66	2.0	4.9	4.4	10	4.9	.15	1.2	0		
19	2.2	1.6	.74	.68	2.0	12	4.1	7.4	4.3	.08	1.2	0		
20	2.2	1.6	.68	.74	2.0	15	4.3	6.2	3.4	.34	.62	.52		
21	2.5	1.6	.64	.78	2.0	6.5	4.2	7.0	3.5	1.2	.21	1.8		
22	2.1	1.5	.60	.84	2.0	7.1	4.2	7.1	5.7	1.7	.03	2.0		
23	2.0	1.4	.60	.82	2.0	5.9	4.0	8.4	7.0	1.3	0	1.6		
24	1.9	1.3	.64	.80	1.9	5.9	4.0	8.4	7.5	1.1	0	1.4		
25	2.0	1.5	.64	.80	1.5	4.6	4.0	8.3	4.9	.92	0	2.0		
26	2.2	1.3	.66	.82	1.3	3.7	3.0	7.2	3.3	.87	0	4.3		
27	2.1	1.3	.74	.88	1.3	2.9	2.5	5.5	3.4	.45	0	4.0		
28	2.0	1.1	.74	.94	1.4	3.7	2.7	5.0	3.9	1.0	0	1.4		
29	1.9	.80	.74	.98		5.9	4.7	4.4	7.2	2.1	0	.69		
30	1.5	.50	.74	1.0		3.1	7.2	4.4	5.8	3.1	1.6	.46		
31	1.2		.68	1.0		2.5		4.6		5.3	2.8			
TOTAL	274.2	47.03	21.48	23.26	43.80	150.8	112.2	262.7	126.3	48.67	34.85	52.47		
MEAN	8.85	1.57	.69	.75	1.56	4.86	3.74	8.47	4.21	1.57	1.12	1.75		
AC-FT	544	93	43	46	87	299	223	521	251	97	69	104		
MAX	91	3.2	.92	1.0	2.1	15	7.2	21	8.2	5.3	4.4	4.3		
MIN	1.2	.50	.50		.90	1.2	1.2	3.5	1.9	.08	0	0		
CAL YR	2006	TOTAL	1025.13	MEAN	2.81 MAX	9	91 MIN	0	AC-FT	2030				

MAX DISCH: 140 CFS AT 19:45 ON Oct. 8, 2006 GH 3.99 FT. GH CORR. 0.04 FT. SHIFT -0.37 FT. MAX GH: 4.03 FT. (GH CORR. 0.04 FT. APPLIED) AT 19:45 ON Oct. 8, 2006

3.28 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

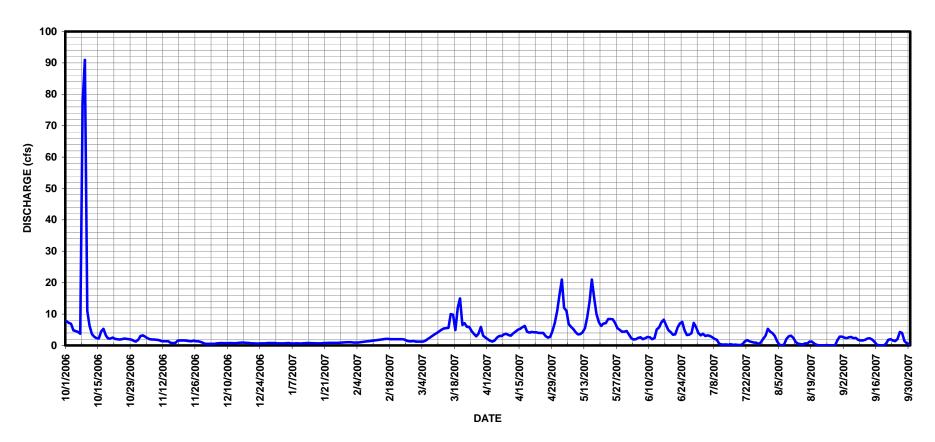
TOTAL 1197.76 MEAN

WTR YR 2007

91 MIN

0 AC-FT

# 08249000 CONEJOS RIVER SECONDARY (SOUTH) CHANNEL NEAR LASAUSES CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 08249000 CONEJOS RIVER NEAR LASAUSES, CO (COMBINED)

LOCATION.--Lat 37°18'01", long 105°44'47", in SW4SW4 sec. 2, and SE4NE4 sec. 10 (two channels), T.35 N., R.ll E., Conejos County, Hydrologic Unit 13010005, on left bank of main channel 125 ft downstream from bridge on State Highway 158 and on left bank of secondary channel 230 ft upstream from bridge on State Route 158, 1.0 mi upstream from mouth, 2.1 mi north of Lasauses, and 13 mi southeast of Alamosa.

DRAINAGE AREA AND PERIOD OF RECORD.--887 mi<sup>2</sup>. Mar. 1921, water stage recorders, at several locations close to present sites.

GAGE.--Two water-stage recorders with satellite telemetry. Datum of gage on main (north) channel is 7,495.02 ft above National Geodetic Vertical Datum of 1929, and on secondary (south) channel is 7,496.89 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Record good, except for periods of no gage height, ice affected, and backwater affected record, which are poor. See individual recors for main (north) and secondary (south) channels. Diversions above station for irrigation of about 75,000 acres. Practically entire flow is diverted and record represents mainly return flow. Record developed by Div. III Hydrographic Staff.

#### COMBINED CONEJOS RIVER (NORLASCO & SOULASCO)

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES DAY OCT NOV DEC JAN FEB APR AUG 7.5 2.57 7.5 4.5 4.3 2.5 7.5 9.3 2.4 4.5 3.6 2.5 6.1 2.1 2.8 2.2 2.8 1.0 9.9 7.5 ---8.1 \_\_\_ 6.4 8.5 TOTAL 1214.9 771.2 MEAN 8.5 39.2 25.7 AC-FT MAX 2.5 MIN 6.5 9.9 CAL YR 2006 TOTAL 33131.4 MEAN 90.8 MAX 542 MIN 3.1 AC-FT 

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

135 MAX

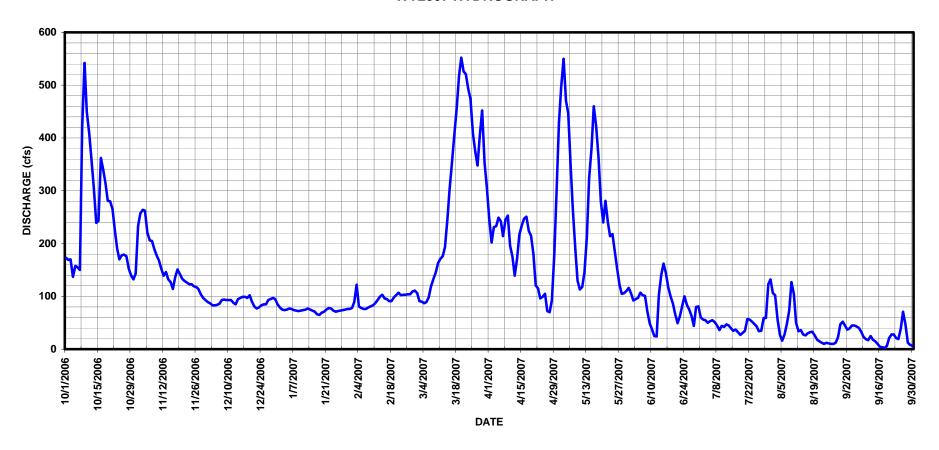
TOTAL 49140.1 MEAN

WTR YR 2007

552 MIN

2.5 AC-FT

# 08249000 CONEJOS RIVER NEAR LASAUSES CO (COMBINED) WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 08250000 CULEBRA CREEK AT SAN LUIS, CO

LOCATION.--Lat 37°11'01", long 105°25'31", Costilla County, Hydrologic Unit 13010002, in Beaubien Grant, on left bank at bridge 1.0 mi. south of San Luis and 1.0 mi. upstream from Rito Seco.

DRAINAGE AREA AND PERIOD OF RECORD. -- 220 mi<sup>2</sup>. Station established April 1, 1927 by Colo. State Engineer's Office at present site, different datum. May 1931 new flume installed and datum established at the same

GAGE. -- Primary record is generated by an electronic data logger with satellite transmitter, which records gageheight data from a float-operated shaft encoder in a metal shelter and rock well. A graphic water-stage recorder is operated as a data backup. Elevation of gage is 8,000 ft from topographic map.

REMARKS.--Record is complete and reliable, except for January 16-27, 2007, when the well was frozen. Record is good, except for period when well was frozen, which is poor. During the winter the record may show a pattern of jagged peaks in the late morning hours. While this pattern does appear to be ice affected record, it has been verified by the hydrographic staff of Division III that this is caused by ice dams releasing water above the gage, and that this is good record. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- CULSANCO06 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCH	MRGE, IN C	ME	AN VALUE		IO SEFIE	MDER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	22	20		25	23	22	21	108	105	53	55
2	21	21	19	22	22	21	20	24	90	101	58	59
3	21	21	18	21	24	22	19	25	83	119	71	62
4	20	21	19	23	23	23	18	24	60	147	79	65
5	20	21	20			24	18	24	78	112	84	76
6	20	21	22	22	26	29	18	27	67	68	87	67
7	21	22	22	22	26	32	19	27	40	91	81	44
8	42	22	22		27	34	24	22	35	112	71	47
9	36	22	23	24	26	32	34	23	79	126	60	48
10	34	21	25	24	27	29	23	20	127	125	58	87
11	27	19	29	25	32	29	19	20	111	114	66	49
12	25	21	26	25	36	29	22	29	92	118	79	41
13	25	20	22	26	30	30	25	49	78	109	76	39
14	23	23	25	24	30	28	27	50	47	97	72	42
15	33	20	25	21	25	25	27	68	33	92	63	42
16	27	22	26	18	24	24	21	86	40	90	77	44
17	24	24	26	19	25	24	20	97	55	83	97	56
18	23	24	27	20	25	24	19	87	53	71	104	66
19	22		26			22	18	84	52	71	107	52
20	23		27			22	18	87	53	75	81	55
21	21		24	21		21	19	98	55	61	59	60
22	20	22	22		31	21	19	104	67	53	73	52
23	20		22			23	18	98	74	50	89	57
24	21	22	21	20	28	27	22	58	85	48	87	64
25	21	23	21	20	25	41	25	49	96	44	92	53
26	23	22	22	21	27	42	23	46	107	44	102	50
27	25	22	24	23	30	32	19	49	100	57	103	48
28	31	22	24	25	27	24	19	74	96	76	102	52
29	31	21	23	23		22	19	102	111	93	93	58
30	29	19	23			21	21	123	119	77	80	52
31	24		21	24		23		128		59	72	
TOTAL	802	650	716	686	764	823	635	1823	2291	2688	2476	1642
MEAN	25.9	21.7	23.1		27.3	26.5	21.2	58.8	76.4	86.7	79.9	54.7
AC-FT	1590	1290	1420		1520	1630	1260	3620	4540	5330	4910	3260
MAX	49	24	29		36	42	34	128	127	147	107	3260 87
	20	24 19	29 18		22	21	18	20	33	44	53	39
MIN	20	19	18	18	22	Z 1	18	∠0	33	44	53	39
CAL YR		TOTAL	14451		39.6 MAX		5 MIN		AC-FT	28660		

MAX DISCH: 189 CFS AT 00:15 ON Jul. 5, 2007 GH 2.12 FT. SHIFT 0.01 FT. MAX GH: 2.12 FT. AT 00:15 ON Jul. 5, 2007

43.8 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

15996 MEAN

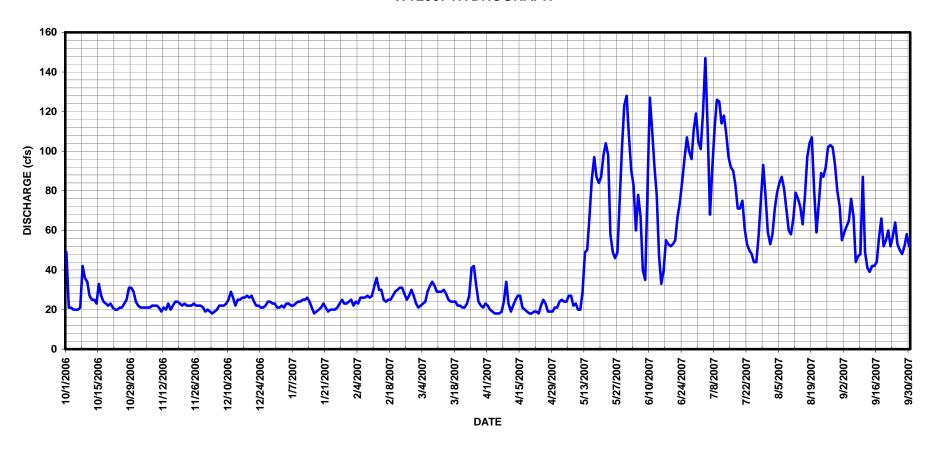
WTR YR 2007

TOTAL

147 MIN

18 AC-FT

# 08250000 CULEBRA CREEK AT SAN LUIS CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 08251500 RIO GRANDE NEAR LOBATOS, CO

LOCATION.--Lat 37°04'43", long 105°45'23", in NE'4NW4 sec. 27, T.33 N., R.11 E., Conejos County, Hydrologic Unit 13010002, on right bank at highway bridge, 5.7 mi north of Colorado-New Mexico State line, 8 mi downstream from Culebra Creek, 11 mi east of Lobatos, and 14 mi east of Antonito.

DRAINAGE AREA AND PERIOD OF RECORD.--7,700 mi². approximately, includes 2,940 mi². in closed basin in northern part of San Luis Valley, Colo. June 28, 1899-Nov. 7, 1910, non-recording gage; Nov. 8, 1910, water stage recorder, at present site and datum.

GAGE.--Primary record is generated by an electronic data logger with satellite transmitter, which records gageheight data from a float-operated shaft encoder in a four foot square timber shelter and cobblestone well. A graphic water-stage recorder is operated as a data backup. Station is also equipped with a water temperature sensor. Auxiliary outside slope gage. Datum of gage is 7,427.63 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record is complete and reliable. The stage-discharge relation was affected by ice Nov. 30, 2006 through Mar. 6, 2007. Record is good, except for periods of ice-affected record, which are fair to poor. Station maintained and record developed by Div. III Hydrographic Staff.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- RIOLOBCO03 USED FROM 01-OCT-2006 TO 30-SEP-2007

				- ,	ME	AN VALUE	S					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	321	414	290	380	320	400	888	609	439	233	380	263
2	309	652	285	360	310	370	803	857	399	197	369	257
3	292	990	270	350	320	400	799	905	366	194	333	253
4	276	971	290	360	320	425	819	763	411	153	241	259
5	282	899	340	360	330	425	802	712	522	164	212	261
6	291	855	380	340	330	425	664	589	552	190	229	257
7	302	829	400	350	340	430	524	518	522	177	264	256
8	370	807	410	340	350	488	472	461	546	160	313	262
9	659	770	430	320	360	498	509	409	424	187	511	252
10	975	796	440	320	380	540	488	390	340	159	619	234
11	821	741	440	330	400	556	408	326	317	208	504	214
12	788	711	400	360	390	588	318	308	316	249	403	210
13	741	676	410	360	390	647	319	327	432	240	338	218
14	684	672	420	340	380	716	389	425	649	215	283	202
15	599	649	430	320	370	837	444	641	759	197	275	200
16	668	612	450	330	380	991	470	708	575	195	258	197
17	828	582	450	300	370	1300	484	783	496	207	247	194
18	814	594	440	290	380	1340	486	688	479	185	282	187
19	676	629	460	280	380	1430	418	616	458	169	333	176
20	575	629	400	290	390	1510	376	528	395	195	330	211
21	523	603	340	280	400	1480	321	539	342	265	311	246
22	547	575	320	280	410	1420	298	661	302	295	287	237
23	545	561	310	300	410	1380	283	601	295	318	274	235
24	497	555	320	310	390	1380	275	603	330	323	247	224
25	466	549	330	320	400	1330	315	573	326	370	228	201
26	481	534	360	310	430	1220	295	550	286	328	213	328
27	466	528	360	320	430	1090	265	509	272	299	222	370
28	444	532	360	330	410	1090	244	472	247	260	239	326
29	406	490	370	320		1180	282	474	212	241	244	284
30	392	350	390	330		1110	399	495	261	290	260	210
31	377		390	340		998		484		406	270	
TOTAL	16415	19755	11685	10120	10470	27994	13857	17524	12270	7269	9519	7224
MEAN	530	659	377	326	374	903	462	565	409	234	307	241
AC-FT	32560	39180	23180	20070	20770	55530	27490	34760	24340	14420	18880	14330
MAX	975	990	460	380	430	1510	888	905	759	406	619	370
MIN	276	350	270	280	310	370	244	308	212	153	212	176
CAL YR	2006	TOTAL	114474	MEAN	314 MAX	99	00 MIN	97	AC-FT	227100		

MAX DISCH: 1560 CFS AT 07:00 ON Mar. 20, 2007 GH 3.22 FT. SHIFT -0.03 FT. MAX GH: 3.24 FT. AT 19:15 ON Nov. 30, 2006

450 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

164102 MEAN

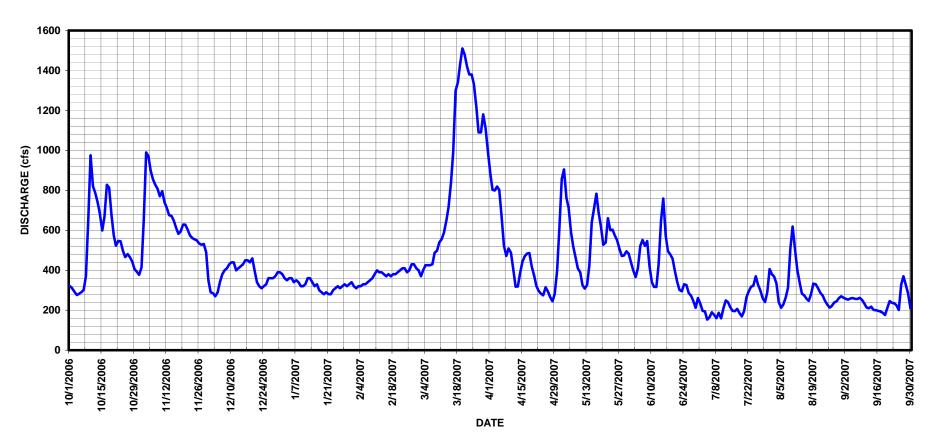
TOTAL

WTR YR 2007

1510 MIN

153 AC-FT

# 08251500 RIO GRANDE NEAR LOBATOS CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 09118200 TARBELL DITCH NEAR COCHETOPA PASS, CO

LOCATION.--Tarbell ditch diverts water from Lake Fork Cochetopa Creek (tributary to Cochetopa Creek), in NW4 sec. 18, T.43 N., R.2 E., in Gunnison River basin, to Lake Fork Creek (tributary to Middle Fork Saguache Creek) in NE4 sec. 18, T.43 N., R.2 E., in Rio Grande basin.

DRAINAGE AREA. --N/A

WTR YR 2007

TOTAL

GAGE.--Graphic water-stage recorder with satellite monitoring system at a 2.5-ft. Parshall Flume.

REMARKS.--Record is complete and reliable. Station maintained and record developed by Div. III Hydrographic Staff.

RATING TABLE. -- TARBELCOO1 USED FROM 01-OCT-2006 TO 30-SEP-2007

#### DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP 1 Ω Ω Ω 0 Ω Λ Ω Ω Ω 4.0 3.3 2.7 2 0 0 0 0 0 0 0 0 0 3.9 3.3 2.4 3.8 3.2 2.4 0 0 0 0 0 0 0 3.8 3.4 2.4 0 0 0 0 0 0 0 0 0 3.8 3.0 4.1 6 0 0 0 0 0 0 0 0 4.4 4.0 6.2 2.5 8.2 2.3 0 0 0 0 0 0 0 0 3.7 6.6 8 Ω Ω Ω Ω 0 Ω Ω Ω 7.2 3.7 6.5 2.3 9 0 0 0 0 0 0 0 7.1 2.3 0 3.5 6.5 0 10 0 0 0 0 0 0 0 7.8 3.4 6.3 2.2 Ω 7.8 2.2 11 0 Ω 0 0 0 0 Ω 3.6 6.2 12 0 0 0 0 0 0 0 0 9.0 3.7 5.6 2.0 13 0 0 0 0 0 0 0 0 8.1 3.5 5.0 1.9 14 0 0 0 0 0 0 0 0 8.5 3.3 5.1 1.8 15 0 0 0 0 0 0 0 0 9.2 3.1 5.8 16 0 0 0 0 0 0 0 0 9.1 3.1 5.3 1.8 17 0 0 0 0 0 0 0 0 8.6 5.5 3.3 2.1 0 0 0 0 0 8.4 3.4 5.8 1.9 0 0 19 0 0 0 0 0 0 7.7 3.5 5.6 1.7 20 0 0 0 0 0 0 0 0 7.4 3.7 1.7 5.4 21 0 0 0 0 0 0 0 0 6.9 5.2 3.2 1.7 22 0 0 0 0 0 0 0 0 6.6 5.0 4.1 1.6 Ω Ω 23 Ω Ω Ω Ω Ω Ω 2.4 6.2 3.5 4.7 0 0 0 0 0 0 6.2 4.6 2.1 2.4 0 0 3.5 0 0 5.9 25 0 0 0 0 Λ 0 3.4 4.3 2.0 Ω 26 0 0 0 0 0 0 Ω 5.8 3.5 4.1 1.9 27 Ω Ω Ω 0 Ω Ω Ω Ω 5.7 3.7 4.0 2.0 28 0 0 0 0 0 0 0 0 5.5 3.6 3.7 2.0 29 0 0 0 0 \_\_\_ 0 0 0 5.2 3.7 3.4 2.3 30 0 0 0 0 \_\_\_ 0 0 0 4.5 3.0 31 0 0 0 ---0 0 3.3 2.9 0 0 177.0 149.3 TOTAL 0 110.9 63.6 0 0 MEAN 0 0 0 0 0 0 5.90 3.58 4.82 2.12 AC-FT 0 0 0 0 0 351 220 296 0 0 0 126 MAX 0 0 0 0 0 0 0 9.2 4.1 6.6 3.0 0 0 0 0 0 0 0 0 2.9 MIN 0 3.1 1.6 .32 MAX CAT. YR 2006 116.3 MEAN 6.7 0 AC-FT 231 TOTAL MTN

MAX DISCH: 12.1 CFS AT 08:45 ON Jun. 7, 2007 GH 1.12 FT. SHIFT 0.01 FT. MAX GH: 1.12 FT. AT 08:45 ON Jun. 7, 2007

1.37 MAX

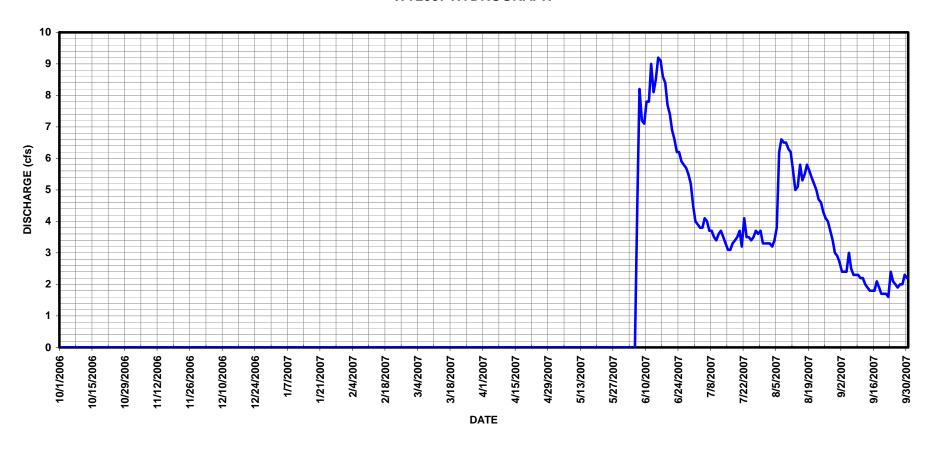
FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

500.8 MEAN

9.2 MIN

0 AC-FT

# 09118200 TARBELL DITCH NEAR COCHETOPA PASS CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 09121000 TABOR DITCH AT SPRING CREEK PASS, CO

LOCATION.--Lat 37°56'30", long 107°09'00"; Tabor ditch diverts water from tributaries of Cebolla Creek in secs, 29 and 36, T.43 N., R.3 W., in Gunnison River basin, to Big Spring Creek (tributary to North Clear Creek) in sec. 35, T.43 N., R.3 W., in Rio Grande basin.

#### DRAINAGE AREA. --N/A

GAGE. -- Steven's Data Logger and satellite monitoring system at 3-ft. Parshall Flume.

**REMARKS.--**Record is complete and reliable. Station maintained and record developed by Div. III Hydrographic Staff.

JUL

AUG

SEP

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- TABDITCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

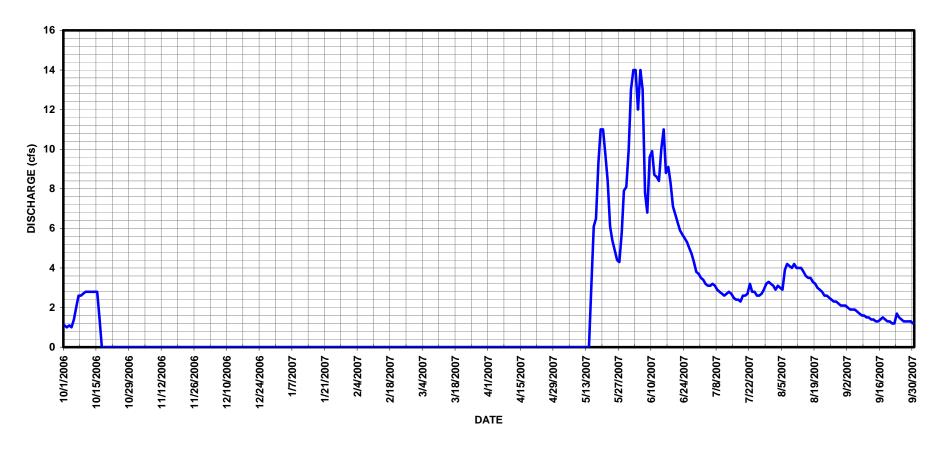
# DAY OCT NOV DEC JAN FEB MAR APR MAY JUN 1 1.1 0 0 0 0 0 0 0 0 13 2 1.0 0 0 0 0 0 0 14

1	1.1	0	0	0	0	0	0	0	13	3.5	3.1	2.1
2	1.0	0	Ö	Ö	0	Ō	Ō	Ō	14	3.4	2.9	2.0
3	1.1	0	0	0	0	0	0	0	14	3.2	3.1	1.9
4	1.0	0	0	0	0	0	0	0	12	3.1	3.0	1.9
5	1.4	0	0	0	0	0	0	0	14	3.1	2.9	1.9
6	2.0	0	0	0	0	0	0	0	13	3.2	3.9	1.8
7	2.6	0	0	0	0	0	0	0	7.8	3.1	4.2	1.7
8	2.6	0	0	0	0	0	0	0	6.8	2.9	4.1	1.6
9	2.7	0	0	0	0	0	0	0	9.6	2.8	4.0	1.6
10	2.8	0	0	0	0	0	0	0	9.9	2.7	4.2	1.5
11	2.8	0	0	0	0	0	0	0	8.7	2.6	4.0	1.5
12	2.8	0	0	0	0	0	0	0	8.6	2.7	4.0	1.4
13	2.8	0	0	0	0	0	0	0	8.4	2.7	4.0	1.4
14	2.8	0	0	0	0	0	0	0	10	2.7	3.8	1.3
15	2.8	0	0	0	0	0	0	3.1	11	2.7	3.6	1.3
16		0	0	0		-		6.1		2.3	3.5	
17	1.5	0	0	0	0	0	0	6.5	8.8 9.1	2.4		1.4 1.5
	0				0	0	0				3.5	
18	0	0	0	0	0	0	0	9.3	8.3	2.3	3.3	1.4
19	0	0	0	0	0	0	0	11	7.1	2.6	3.2	1.3
20	0	0	0	0	0	0	0	11	6.7	2.6	3.0	1.3
21	0	0	0	0	0	0	0	9.7	6.3	2.7	2.9	1.2
22	0	0	0	0	0	0	0	8.4	5.9	3.2	2.8	1.2
23	0	0	0	0	0	0	0	6.1	5.7	2.8	2.6	1.7
24	0	0	0	0	0	0	0	5.4	5.5	2.8	2.6	1.5
25	0	0	0	0	0	0	0	4.9	5.3	2.6	2.5	1.4
26	0	0	0	0	0	0	0	4.4	5.0	2.6	2.4	1.3
27	0	0	0	0	0	0	0	4.3	4.7	2.7	2.3	1.3
28	0	0	0	0	0	0	0	5.8	4.3	2.9	2.3	1.3
29	0	0	0	0		0	0	7.9	3.8	3.2	2.2	1.3
30	0	0	0	0		0	0	8.1	3.7	3.3	2.1	1.2
31	0		0	0		0		10		3.2	2.1	
TOTAL	33.8	0	0	0	0	0	0	122.0	251.0	88.6	98.1	45.2
MEAN	1.09	0	0	0	0	0	0	3.94	8.37	2.86	3.16	1.51
AC-FT	67	0	0	0	0	0	0	242	498	176	195	90
MAX	2.8	0	0	0	0	0	0	11	14	3.5	4.2	2.1
MIN	0	0	0	0	0	0	0	0	3.7	2.3	2.1	1.2
CAL YR	2006	TOTAL	420.89 MEAN	J	L.15 MAX	8.4	MIN	0	AC-FT	835		

CAL YR 2006 TOTAL 420.89 MEAN 1.15 MAX 8.4 MIN 0 AC-FT 835 WTR YR 2007 TOTAL 638.7 MEAN 1.75 MAX 14 MIN 0 AC-FT 1270

MAX DISCH: 19 CFS AT 18:30 ON Jun. 5, 2007 GH 1.28 FT. SHIFT 0.06 FT. MAX GH: 1.28 FT. AT 18:30 ON Jun. 5, 2007

# 09121000 TABOR DITCH AT SPRING CREEK PASS CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 09341000 TREASURE PASS DITCH AT WOLF CREEK PASS, CO

LOCATION.--Treasure Pass diversion ditch diverts water from tributaries of Wolf Creek in San Juan River basin, to tributary of South Fork Rio Grande in sec. 5, T.37 N., R.2 E., in Rio Grande basin.

DRAINAGE AREA.--N/A

GAGE. -- Graphic water-stage recorder at a 2-ft. Parshall Flume.

**REMARKS.--**Record is complete and reliable. Station maintained and record developed by Div. III Hydrographic Staff.

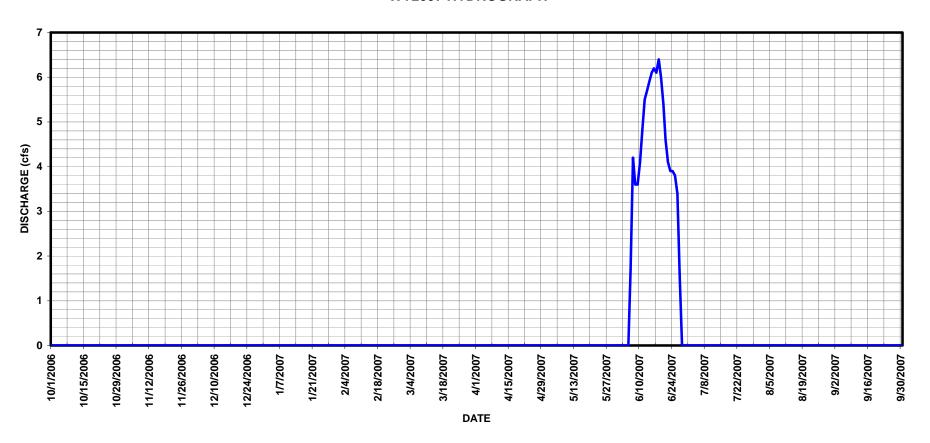
RATING TABLE. -- TREDITCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	1.7	0	0	0
7	0	0	0	0	0	0	0	0	4.2	0	0	0
8	0	0	0	0	0	0	0	0	3.6	0	0	0
9	0	0	0	0	0	0	0	0	3.6	0	0	0
10	0	0	0	0	0	0	0	0	4.1	0	0	0
11	0	0	0	0	0	0	0	0	4.8	0	0	0
12	0	0	0	0	0	0	0	0	5.5	0	0	0
13	0	0	0	0	0	0	0	0	5.7	0	0	0
14	0	0	0	0	0	0	0	0	5.9	0	0	0
15	0	0	0	0	0	0	0	0	6.1	0	0	0
16	0	0	0	0	0	0	0	0	6.2	0	0	0
17	0	0	0	0	0	0	0	0	6.1	0	0	0
18	0	0	0	0	0	0	0	0	6.4	0	0	0
19	0	0	0	0	0	0	0	0	6.0	0	0	0
20	0	0	0	0	0	0	0	0	5.4	0	0	0
21	0	0	0	0	0	0	0	0	4.6	0	0	0
22	0	0	0	0	0	0	0	0	4.1	0	0	0
23	0	0	0	0	0	0	0	0	3.9	0	0	0
24	0	0	0	0	0	0	0	0	3.9	0	0	0
25	0	0	0	0	0	0	0	0	3.8	0	0	0
26	0	0	0	0	0	0	0	0	3.4	0	0	0
27	0	0	0	0	0	0	0	0	1.6	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0		0	0	0	0	0	0	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0		0	0		0		0		0	0	
TOTAL	0	0	0	0	0	0	0	0	100.6	0	0	0
MEAN	0	0	0	0	0	0	0	0	3.35	0	0	0
AC-FT	0	0	0	0	0	0	0	0	200	0	0	0
MAX	0	0	0	0	0	0	0	0	6.4	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR	2006	TOTAL	36.15 ME	AN	.099 MAX	3	MIN	0	AC-FT	72		
WTR YR	2007	TOTAL	100.6 ME		.28 MAX	6.4			AC-FT	200		

MAX DISCH: 7.5 CFS AT 11:30 ON Jun. 20, 2007 GH 0.90 FT. SHIFT 0.06 FT. MAX GH: 0.90 FT. AT 11:30 ON Jun. 20, 2007

# 09341000 TREASURE PASS DITCH AT WOLF CREEK PASS CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 09347000 DON LA FONT DITCH NO.1 AT PIEDRA PASS, CO

LOCATION.--SW4 sec. 33, T.39 N., R.1 W., at Piedra Pass, Co. Diversion is from tributaries of Piedra River Basin to Red Mountain Creek in Rio Grande River Basin.

DRAINAGE AREA.--N/A

GAGE. -- Graphic water-stage recorder at 9-in. Parshall Flume.

**REMARKS.--**Record is complete and reliable. Station maintained and record developed by Div. III Hydrographic Staff.

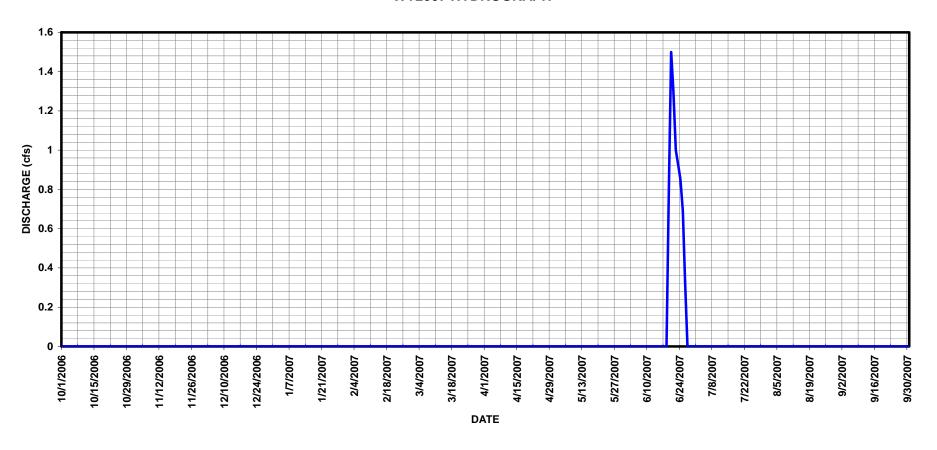
RATING TABLE. -- DLFDT1C002 USED FROM 01-OCT-2006 TO 30-SEP-2007

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	.77	0	0	0
20	0	0	0	0	0	0	0	0	1.5	0	0	0
21	0	0	0	0	0	0	0	0	1.3	0	0	0
22	0	0	0	0	0	0	0	0	1.0	0	0	0
23	0	0	0	0	0	0	0	0	.93	0	0	0
24	0	0	0	0	0	0	0	0	.85	0	0	0
25	0	0	0	0	0	0	0	0	.69	0	0	0
26	0	0	0	0	0	0	0	0	.33	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0		0	0	0	0	0	0	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0		0	0		0		0		0	0	
TOTAL	0	0	0	0	0	0	0	0	7.37	0	0	0
MEAN	0	0	0	0	0	0	0	0	.25	0	0	0
AC-FT	0	0	0	0	0	0	0	0	15	0	0	0
MAX	0	0	0	0	0	0	0	0	1.5	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR	2006	TOTAL	0 MEAN	r	0 MAX	0	MIN	0 <i>P</i>	AC-FT	0		
WTR YR		TOTAL	7.37 MEAN		.02 MAX	1.5			C-FT	15		
******	2007	1011111	, , IIIIAN	•	. 02 11111	1.5	11114	0 1		10		

MAX DISCH: 2.57 CFS AT 15:00 ON Jun. 19, 2007 GH 0.92 FT. SHIFT -0.03 FT. MAX GH: 0.92 FT. AT 15:00 ON Jun. 19, 2007

# 09347000 DON LA FONT DITCH NO.1 AT PIEDRA PASS CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 09347000 DON LA FONT DITCH NO.2 AT PIEDRA PASS, CO

LOCATION.--SW<sup>1</sup>4 sec. 33, T.39 N., R.1 W., at Piedra Pass, Co. Diversion is from tributaries of Piedra River in San Juan River Basin to Red Mountain Creek in Rio Grande River Basin.

DRAINAGE AREA.--N/A

GAGE. -- Stevens Data logger and satellite monitoring system at 1.5-ft Parshall Flume.

**REMARKS.--**Record is complete and reliable. Station maintained and record developed by Div. III Hydrographic Staff.

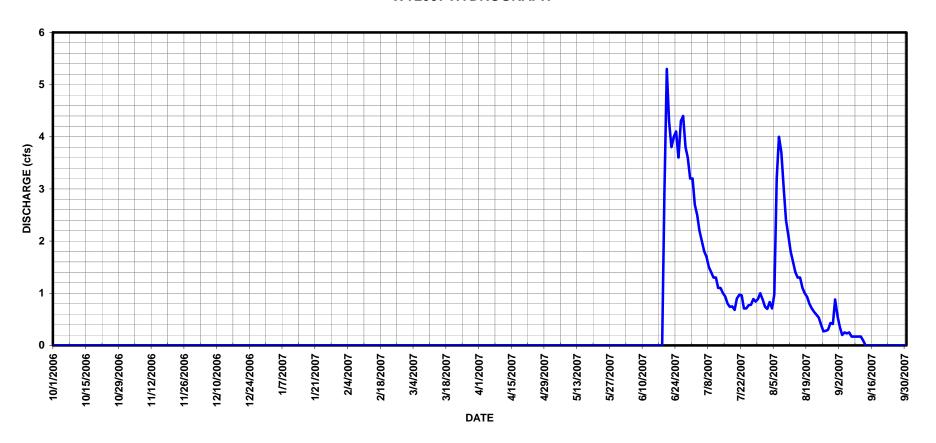
RATING TABLE. -- DLFDT2CO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	3.2	.74	.56
2	0	0	0	0	0	0	0	0	0	2.7	.70	.36
3	0	0	0	0	0	0	0	0	0	2.5	.83	.20
4	0	0	0	0	0	0	0	0	0	2.2	.71	.25
5	0	0	0	0	0	0	0	0	0	2.0	.98	.23
6	0	0	0	0	0	0	0	0	0	1.8	3.2	.25
7	0	0	0	0	0	0	0	0	0	1.7	4.0	.17
8	0	0	0	0	0	0	0	0	0	1.5	3.7	.17
9	0	0	0	0	0	0	0	0	0	1.4	3.0	.17
10	0	0	0	0	0	0	0	0	0	1.3	2.4	.17
11	0	0	0	0	0	0	0	0	0	1.3	2.1	.17
12	0	0	0	0	0	0	0	0	0	1.1	1.8	.09
13	0	0	0	0	0	0	0	0	0	1.1	1.6	0
14	0	0	0	0	0	0	0	0	0	1.0	1.4	0
15	0	0	0	0	0	0	0	0	0	.94	1.3	0
16	0	0	0	0	0	0	0	0	0	.80	1.3	0
17	0	0	0	0	0	0	0	0	0	.74	1.1	0
18	0	0	0	0	0	0	0	0	0	.75	1.0	0
19	0	0	0	0	0	0	0	0	2.9	.68	.93	0
20	0	0	0	0	0	0	0	0	5.3	.90	.80	0
21	0	0	0	0	0	0	0	0	4.3	.97	.71	0
22	0	0	0	0	0	0	0	0	3.8	.96	.64	0
23	0	0	0	0	0	0	0	0	4.0	.71	.59	0
24	0	0	0	0	0	0	0	0	4.1	.71	.53	0
25	0	0	0	0	0	0	0	0	3.6	.77	.39	0
26	0	0	0	0	0	0	0	0	4.3	.78	.27	0
27	0	0	0	0	0	0	0	0	4.4	.89	.28	0
28	0	0	0	0	0	0	0	0	3.8	.84	.30	0
29	0	0	0	0		0	0	0	3.6	.89	.43	0
30	0	0	0	0		0	0	0	3.2	1.0	.41	0
31	0		0	0		0		0		.88	.88	
TOTAL	0	0	0	0	0	0	0	0	47.3	39.01	39.02	2.79
MEAN	0	0	0	0	0	0	0	0	1.58	1.26	1.26	.093
AC-FT	0	0	0	0	0	0	0	0	94	77	77	5.5
MAX	0	0	0	0	0	0	0	0	5.3	3.2	4.0	.56
MIN	0	0	0	0	0	0	0	0	0	.68	.27	0
CAL YR	2006	TOTAL	0 ME	AN	0 MAX	0	MIN	0	AC-FT	0		
WTR YR	2007	TOTAL	128.12 ME	AN	.35 MAX	5.3	MIN	0	AC-FT	254		

MAX DISCH: 8.57 CFS AT 13:45 ON Aug. 7, 2007 GH 1.24 FT. SHIFT 0.02 FT. MAX GH: 1.59 FT. AT 21:00 ON Aug. 30, 2007

# 09347000 DON LA FONT DITCH N0.2 AT PIEDRA PASS CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 09347000 DON LA FONT DITCH, COMBINED, AT PIEDRA PASS, CO

LOCATION.--Don La Font ditches 1 and 2 divert water from tributaries of Piedra River between headgates in NW4 sec. 4, T.38 N., R.1 W., and SW4 sec. 33, T.39 N., R.1 W., and Piedra pass, in San Juan River basin, to Red Mountain Creek in sec. 33, T.39 N., R.1 W., in Rio Grande basin.

DRAINAGE AREA. --N/A

GAGE. -- Graphic water-stage recorders.

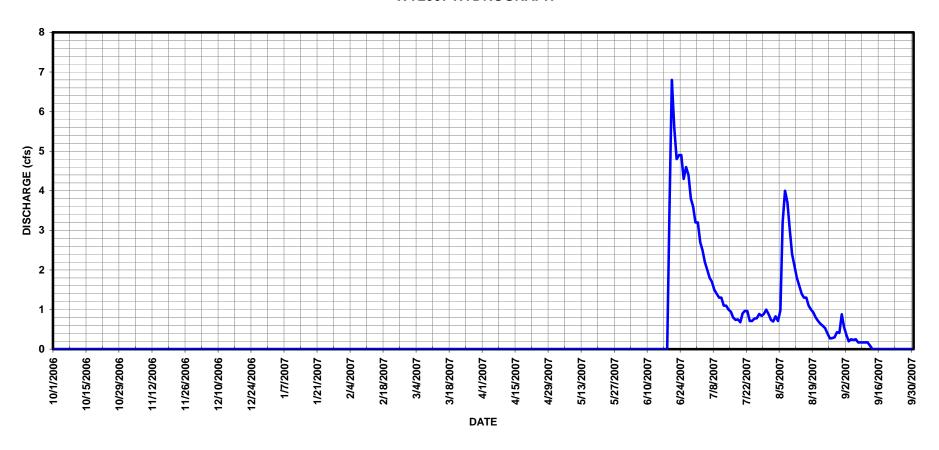
**REMARKS.--**Record is complete and reliable. Station maintained and record developed by Div. III Hydrographic Staff.

#### DON LA FONT DITCH COMBINED (DITCH NO. 1 & 2)

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	3.2	.74	.56
2	0	0	0	0	0	0	0	0	0	2.7	.7	.36
3	0	0	0	0	0	0	0	0	0	2.5	.83	.2
4	0	0	0	0	0	0	0	0	0	2.2	.71	.25
5	0	0	0	0	0	0	0	0	0	2	.98	.23
6	0	0	0	0	0	0	0	0	0	1.8	3.2	.25
7	0	0	0	0	0	0	0	0	0	1.7	4	.17
8	0	0	0	0	0	0	0	0	0	1.5	3.7	.17
9	0	0	0	0	0	0	0	0	0	1.4	3	.17
10	0	0	0	0	0	0	0	0	0	1.3	2.4	.17
11	0	0	0	0	0	0	0	0	0	1.3	2.1	.17
12	0	0	0	0	0	0	0	0	0	1.1	1.8	.09
13	0	0	0	0	0	0	0	0	0	1.1	1.6	0
14	0	0	0	0	0	0	0	0	0	1	1.4	0
15	0	0	0	0	0	0	0	0	0	.94	1.3	0
16	0	0	0	0	0	0	0	0	0	.8	1.3	0
17	0	0	0	0	0	0	0	0	0	.74	1.1	0
18	0	0	0	0	0	0	0	0	0	.75	1	0
19	0	0	0	0	0	0	0	0	3.7	.68	.93	0
20	0	0	0	0	0	0	0	0	6.8	. 9	.8	0
21	0	0	0	0	0	0	0	0	5.6	.97	.71	0
22	0	0	0	0	0	0	0	0	4.8	.96	.64	0
23	0	0	0	0	0	0	0	0	4.9	.71	.59	0
24	0	0	0	0	0	0	0	0	4.9	.71	.53	0
25	0	0	0	0	0	0	0	0	4.3	.77	.39	0
26	0	0	0	0	0	0	0	0	4.6	.78	.27	0
27	0	0	0	0	0	0	0	0	4.4	.89	.28	0
28	0	0	0	0	0	0	0	0	3.8	.84	.3	0
29	0	0	0	0		0	0	0	3.6	.89	.43	0
30	0	0	0	0		0	0	0	3.2	1	.41	0
31	0		0	0		0		0		.88	.88	
TOTAL	0	0	0	0	0	0	0	0	54.6	39.01	39.02	2.79
MEAN	0	0	0	0	0	0	0	0	1.82	1.26	1.26	.09
AC-FT	0	0	0	0	0	0	0	0	108	77	77	5.5
MAX	0	0	0	0	0	0	0	0	6.8	3.2	4	.56
MIN	0	0	0	0	0	0	0	0	0	.68	.27	0
CAL YR	2006	TOTAL	0	MEAN	0 MAX	ζ	0 MIN	0	AC-FT	0		
WTR YR	2007	TOTAL		MEAN	.37 MAX		.8 MIN	0	AC-FT	269		

# 09347000 DON LA FONT DITCH, COMBINED, AT PIEDRA PASS CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 09348000 WILLIAM'S CREEK-SQUAW PASS DITCH AT SQUAW PASS, CO

LOCATION.--William's Creek-Squaw Pass ditch diverts water from William's Creek (tributary to Piedra River) in sec. 21, T.39 N., R.3 W., in San Juan River basin, to Squaw Creek in sec. 21, T.39 N., R.3 W., in Rio Grande basin.

DRAINAGE AREA. --N/A

CAL YR

WTR YR

2006

2007

TOTAL

TOTAL

GAGE. -- Satellite monitored DCP at a 2-ft. Parshall Flume.

**REMARKS.--**Record is complete and reliable. Station maintained and record developed by Div. III Hydrographic Staff.

RATING TABLE. -- WCSDITCO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

#### DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP 0 0 0 0 0 0 0 3.4 0 1.1 0 0 0 0 0 3.7 2.7 1.0 3 0 0 0 0 0 0 0 3.8 2.4 1.3 0 0 0 4.0 2.2 0 0 0 0 0 1.2 0 5 0 0 0 0 0 0 0 0 2.1 4.4 1.4 0 0 0 0 0 1.8 2.6 6 0 0 0 3.5 0 Ω Ω Ω Ω 0 Ω Ω Ω 7 2.4 1.7 2.3 0 8 0 0 0 0 0 0 0 0 2.5 1.7 1.9 0 9 0 0 0 0 0 Λ Λ Ω 3 0 1.5 1.5 Λ 1.0 0 0 0 0 0 0 0 Ω 4.6 1.5 1.4 0 11 Ω Ω Ω 0 Ω Ω Ω Ω 5.4 1.4 1.4 Ω 12 0 0 0 0 0 0 0 0 6.3 1.4 1.3 Ω 1.3 0 0 0 0 0 0 0 0 6.3 1.4 1.2 0 14 0 0 0 0 0 0 0 0 0 15 0 0 0 0 0 0 0 0 7.8 1.3 1.1 0 0 0 0 0 0 0 0 0 7.7 1.2 0 17 0 0 0 0 0 0 0 0 8.2 1.3 .99 0 18 0 0 0 0 0 0 0 7.9 1.4 .95 0 0 0 0 0 7.1 19 0 0 0 0 1.3 .92 0 0 0 0 0 0 0 0 0 6.9 20 .85 0 1.4 21 0 0 0 0 0 0 0 0 5.7 1.6 .80 0 Ω Ω Ω Ω Ω Ω Ω Ω 5.9 22 1.6 .76 0 2.3 0 0 0 0 0 0 0 0 5.8 1.4 .49 0 2.4 0 0 0 0 0 0 Λ 0 5.3 1.3 Λ Ω 25 0 0 0 0 0 0 0 Ω 4.8 1.2 Ω 0 26 0 Ω 0 0 Ω Ω Ω Ω 4.1 1.2 Ω Ω 27 0 0 0 0 0 0 0 0 3.5 1.2 0 Ω 2.8 0 0 0 0 0 0 0 .61 3.3 1.1 0 0 29 0 0 0 0 ---0 0 1.9 3.2 0 0 30 0 0 0 0 ---0 0 2.5 3.1 1.2 0 0 0 0 0 0 31 2.9 1.2 0 0 0 0 0 0 0 0 7.91 150.3 48.2 0 TOTAL 28.56 .26 MEAN 0 0 0 0 0 0 0 5.01 1.55 . 92 0 AC-FT 0 0 0 0 0 0 0 16 298 96 57 0 3.0 2.9 8.2 2.6 MAX 0 0 0 0 0 0 0 0 Ω Ω Ω Ω Ω Ω MTN 0 0 Ω 2.4 1.1 Ω

MAX DISCH: 13.5 CFS AT 16:30 ON Jun. 17, 2007 GH 1.15 FT. SHIFT -0.03 FT. MAX GH: 1.15 FT. AT 16:30 ON Jun. 17, 2007

.50 MAX

.64 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

180.98 MEAN

234.97 MEAN

5.0

8.2

MTN

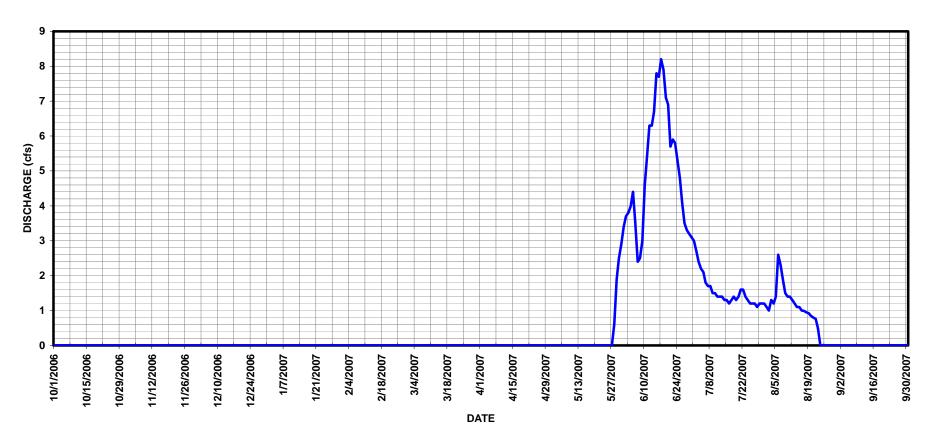
MIN

0 AC-FT

0 AC-FT

359

# 09348000 WILLIAM'S CREEK-SQUAW PASS DITCH AT SQUAW PASS CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 09351500 PINE RIVER WEMINUCHE PASS DITCH AT WEMINUCHE PASS, CO

LOCATION.--Pine River-Weminuche Pass ditch diverts water from right bank of north fork of Los Pinos River in sec. 4, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec. 33, T.40 N., R.4 W., in Rio Grande basin.

DRAINAGE AREA. --N/A

GAGE.--Graphic water-stage recorder and Sutron satellite monitoring system at 3-ft Parshall Flume.

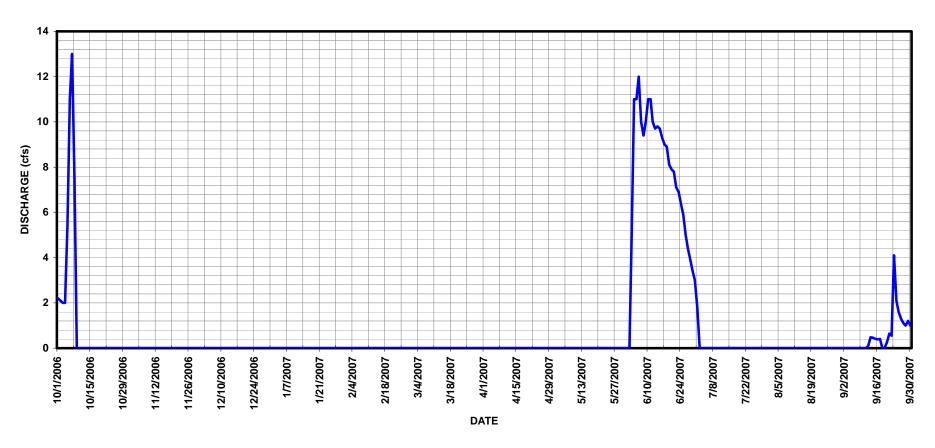
REMARKS.--Record is complete and reliable. Station maintained and record developed by Div. III Hydrographic Staff.

RATING TABLE.--PRWDITCO04 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE,	IN CFS		EAR OCTOB AN VALUES	ER 2006 T	O SEPTEM	BER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	0	0	0	0	0	0	0	0	1.8	0	0
2	2.1	0	0	0	0	0	0	0	0	0	0	0
3	2.0	0	0	0	0	0	0	0	5.0	0	0	0
4	2.0	0	0	0	0	0	0	0	11	0	0	0
5	5.4	0	0	0	0	0	0	0	11	0	0	0
6	11	0	0	0	0	0	0	0	12	0	0	0
7	13	0	0	0	0	0	0	0	10	0	0	0
8	7.5	0	0	0	0	0	0	0	9.4	0	0	0
9	0	0	0	0	0	0	0	0	10	-	0	0
10 11	0	0	0	0	0	0	0	0	11 11	0	0	0
12	0	0	0	0	0	0	0	0	10	0	0	.11
13	0	0	0	0	0	0	0	0	9.7	0	0	.48
14	0	0	0	0	0	0	0	0	9.8	0	0	.46
15	0	0	0	0	0	0	0	0	9.7	0	0	.41
16	0	0	0	0	0	0	0	0	9.3	0	0	.39
17	0	Ő	0	0	0	0	0	0	9.0	0	0	.40
18	0	0	0	0	0	0	0	Ō	8.9	0	0	0
19	Ō	0	Ō	Ö	Ö	Ö	Ō	Ö	8.1	0	Ö	0
20	0	0	0	0	0	0	0	0	7.9	0	0	.26
21	0	0	0	0	0	0	0	0	7.8	0	0	.64
22	0	0	0	0	0	0	0	0	7.1	0	0	.55
23	0	0	0	0	0	0	0	0	6.9	0	0	4.1
24	0	0	0	0	0	0	0	0	6.4	0	0	2.1
25	0	0	0	0	0	0	0	0	5.9	0	0	1.6
26	0	0	0	0	0	0	0	0	5.0	0	0	1.3
27	0	0	0	0	0	0	0	0	4.4	0	0	1.1
28	0	0	0	0	0	0	0	0	3.9	0	0	1.0
29	0	0	0	0		0	0	0	3.4	0	0	1.2
30	0	0	0	0		0	0	0	3.0	0	0	1.0
31	0		0	0		0		0		0	0	
TOTAL	45.2	0	0	0	0	0	0	0	226.6	1.8	0	17.10
MEAN	1.46	0	0	0	0	0	0	0	7.55	.058	0	.57
AC-FT	90	0	0	0	0	0	0	0	449	3.6	0	34
MAX	13	0	0	0	0	0	0	0	12	1.8	0	4.1
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR	2006	TOTAL	232.5 MEAN		.64 MAX	13	MIN	0	AC-FT	461		
WTR YR		TOTAL	290.7 MEAN		.80 MAX	13			AC-FT	577		

MAX DISCH: 12.9 CFS AT 09:45 ON Oct. 7, 2006 GH 1.09 FT. SHIFT -0.04 FT. MAX GH: 1.09 FT. AT 09:45 ON Oct. 7, 2006

# 09351500 PINE RIVER WEMINUCHE PASS DITCH AT WEMINUCHE PASS CO WY2007 HYDROGRAPH



#### RIO GRANDE BASIN

#### 09351500 WEMINUCHE PASS DITCH AT WEMINUCHE PASS, CO

LOCATION.--Weminuche Pass ditch diverts water from left bank of Rincon la Vaca Creek (tributary to Los Pinos River) in sec. 5, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec. 33, T.40 N., R.4 W., in Rio Grande basin.

#### DRAINAGE AREA. --N/A

GAGE. -- Graphic water-stage recorder at a 5-ft. Parshall Flume.

**REMARKS.--**Record is complete and reliable. Station maintained and record developed by Div. III Hydrographic Staff.

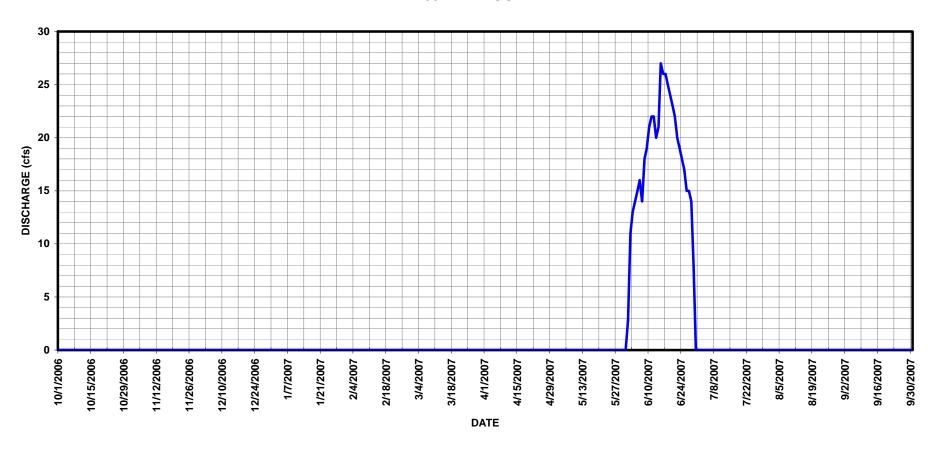
RATING TABLE.--WEMDITCO05 USED FROM 01-OCT-2006 TO 30-SEP-2007

# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES $\,$

1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
2	1	0	0	0	0	0	0	0	0	2.8	0	0	0
4 0 0 0 0 0 0 0 0 0 0 0 0 0 144 0 0 0 0	2	0	0	0	0	0	0	0	0		0	0	0
5 0 0 0 0 0 0 0 0 0 0 0 0 15 0 0 0 0 0 0	3	0	0	0	0	0	0	0	0	13	0	0	0
6 0 0 0 0 0 0 0 0 0 0 0 16 0 0 0 0 0 0 0	4	0	0	0	0	0	0	0	0		0	0	0
7 0 0 0 0 0 0 0 0 0 14 0 0 0 0 0 0 0 0 0	5	0	0	0	0	0	0	0	0		0	0	0
8 0 0 0 0 0 0 0 0 0 0 18 0 0 0 0 0 0 19 0 0 0 0 0 0 0 0 0 0 0 0		0	0	0	0	0	0	0	0		0	0	0
9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-		-	0	-						
10			-			0					0		
11			-		-	0	-				-	-	
12			-			0					•	-	
13			-			-	-						
14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-		-	-	-		-		-	-	
15 0 0 0 0 0 0 0 0 0 0 0 0 0 27 0 0 0 0 16 16 0 0 0 0 0 0 0 0 0 0 0 0 0			-		-	-	-				-	-	
16 0 0 0 0 0 0 0 0 0 0 0 0 26 0 0 0 0 17.6 0 0 18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						-					-		
17													
18 0 0 0 0 0 0 0 0 0 0 0 0 25 0 0 0 0 0 19 19 0 0 0 0 0 0 0 0 0 0 0 0			-		-	-			-		-	-	
19 0 0 0 0 0 0 0 0 0 0 0 0 0 24 0 0 0 0 0		-	-	-	-	-	-	-	-		O .	-	-
20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 23 0 0 0 0						-	-				-		
21 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					-	-	-				-		
22 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						-							
23 0 0 0 0 0 0 0 0 0 0 0 19 0 0 0 0 0 0 0						-	-				-		
24 0 0 0 0 0 0 0 0 0 0 0 18 0 0 0 0 0 0 0													
25 0 0 0 0 0 0 0 0 0 0 0 177 0 0 0 0 26 0 0 0 0 0 0 0 0 0 0 0 0 0 0						-					-		
26 0 0 0 0 0 0 0 0 0 0 15 0 0 0 0 0 0 27 0 0 0 0 0 0 0 0 0 0 0 0			-		-	-	-				-	-	
27  0  0  0  0  0  0  0  0  0  0  0  0  0			-		-	-	-				•	-	-
28 0 0 0 0 0 0 0 0 0 14 0 0 0 0 0 0 0 0 0													
29 0 0 0 0 0 0 0 0 7.8 0 0 0 0 30 0 30 0 0 0 0 0 0 0 0 0 0 0						-							
30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-		-		-	-				-	
31 0 0 0 0 0 0 0 0 0 1 0 0 1 0 0 0 0			-		-		-				-	-	
TOTAL 0 0 0 0 0 0 0 0 0 0 527.6 0 0 0 0 MEAN 0 0 0 0 0 0 0 0 17.6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
MEAN 0 0 0 0 0 0 0 0 0 0 0 0 17.6 0 0 0 0 AC-FT 0 0 0 0 0 0 0 0 0 1050 0 0 0 0 0 0 0 0	31	U		U	U		U		U		U	U	
AC-FT 0 0 0 0 0 0 0 0 0 0 0 1050 0 0 0 0 0 0													
MAX 0 0 0 0 0 0 0 0 0 0 27 0 0 0 0 MIN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0	0	0	0	0	0	0		0	0	0
MIN 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0				0	0				0	0	
CAL YR 2006 TOTAL 121.8 MEAN .33 MAX 18 MIN 0 AC-FT 242													
	MIN	0	0	0	0	0	0	0	0	0	0	0	0
	CAL YR	2006	TOTAL	121.8 MEAN		.33 MAX	1.8	MIN	0	AC-FT	242		
									0				

MAX DISCH: 28.1 CFS AT 19:30 ON Jun. 15, 2007 GH 1.30 FT. GH CORR. -0.05 FT. SHIFT -0.01 FT. MAX GH: 1.25 FT. (GH CORR. -0.05 FT. APPLIED) AT 19:30 ON Jun. 15, 2007

# 09351500 WEMINUCHE PASS DITCH AT WEMINUCHE PASS CO WY2007 HYDROGRAPH



#### GUNNISON RIVER BASIN

#### 09131490 MUDDY CREEK ABOVE PAONIA RESERVOIR

LOCATION.--Lat 38°59'15", long 107°20'53", in the NE4 SE4 NW4 sec 28, T.12 S., R.89 W. in Gunnison County on the right bank 700 ft. downstream from county bridge and 1400 ft. upstream from high water line of Paonia Reservoir.

GAGE.--Satellite equipment (high data rate Sutron 8210 DCP and shaft encoder) and strip chart recorder (Stevens A35) in a culvert type shelter. The recorder and shaft encoder operate from floats and are set to an inside drop tape. A Sutron Accububble installed Nov 4, 2002 is used during the winter period. An oil cylinder was installed on Nov 29, 2006. There was a common float actuating the shaft encoder and strip chart until Jun. 4, 2007 when the oil cylinder was removed and the two floats went back into operation.

REMARKS.--The record is complete. The primary record is 15-minute satellite data. Any missing satellite data were filled in directly using data from the DCP datalogger file. The block form Nov. 1, 2006 through Mar. 31, 2007 was imported from the electronic data logger file. The record is reliable and good, except for the periods when the stage-discharge relationship was affected by ice, and when the discharge exceeded 400 cfs. The ice period was from Nov. 30, Dec. 1-16, Dec. 22-31, 2006, Jan. 1-29, and Mar. 1-6, 2007. These estimated days are poor. Days with mean daily flows greater than 400 cfs were Apr 7-10, 28-30, May 1-6, 11-17, 2007. These should be considered fair. Station maintained by Steven W. Tuck and Gerald M. Thrush and record developed by Gerald M. Thrush.

RATING TABLE. -- MUDAPRCO07 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

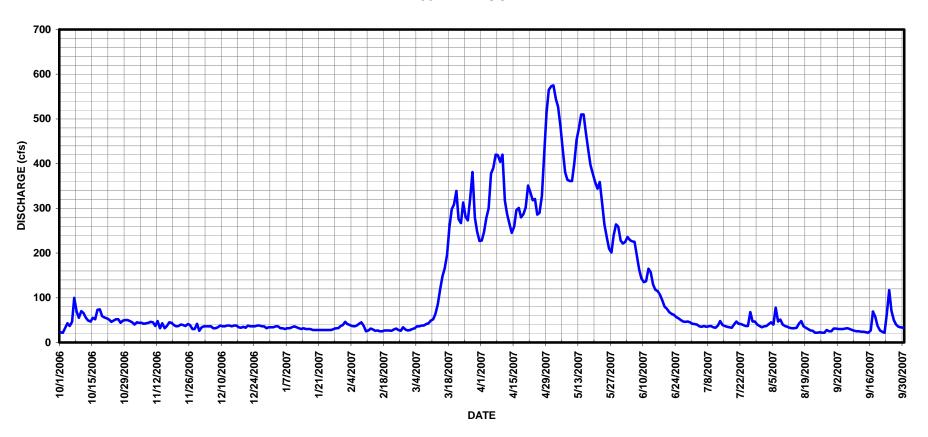
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	45	34e	34e	46	28e	228	573	221	42	36	31
2	22	40	36e	36e	41	30e	247	575	225	41	37	30
3	32	45	36e	36e	39	32e	279	545	236	40	41	30
4	43	44	36e	32e	37	36e	300	527	229	36	45	30
5	37	44	36e	32e	36	36e	378	483	226	35	40	31
6	46	42	32e	30e	38	38e	390	432	225	37	78	32
7	100	43	32e	32e	42	38	420	381	195	35	47	30
8	69	44	34e	32e	45	41	419	364	163	36	51	28
9	55	46	38e	34e	37	43	404	361	143	37	40	26
10	70	45	36e	36e	25	49	420	361	135	34	37	25
11	66	37	36e	34e	27	52	317	401	137	33	35	25
12	55	48	38e	32e	31	64	287	453	165	38	33	24
13	49	32	38e	30e	29	86	265	480	157	48	32	24
14	47	43	36e	32e	26	118	245	510	130	39	32	23
15	55	32	38e	30e	27	148	259	510	118	37	33	22
16	52	37	38e	30e	25	166	296	470	115	35	42	27
17	73	45	34	30e	25	197	301	431	107	34	48	69
18	74	44	33	28e	27	257	280	397	94	33	36	57
19	59	39	35	28e	27	298	287	377	80	40	33	37
20	56	36	33	28e	27	309	302	359	75	47	30	27
21	54	37	38	28e	26	339	351	344	68	42	27	24
22	51	40	36e	28e	29	276	336	359	64	41	26	22
23	46	39	36e	28e	31	267	318	311	62	39	22	64
24	49	37	36e	28e	28	313	321	264	57	37	22	117
25	52	41	38e	28e	26	281	286	235	54	37	23	71
26	52	39	38e	28e	34	273	290	210	50	68	22	50
27	44	30	36e	30e	29	324	328	201	47	47	22	40
28	49	30	36e	32e	27	381	420	239	46	47	28	35
29	50	42	32e	32e		279	515	264	47	40	25	34
30	50	26e	34e	37		248	565	259	45	37	25	33
31	48		34e	39		227		228		34	31	
TOTAL	1628	1192	1103	974	887	5274	10054	11904	3716	1226	1079	1118
MEAN	52.5	39.7	35.6	31.4	31.7	170	335	384	124	39.5	34.8	37.3
AC-FT	3230	2360	2190	1930	1760	10460	19940	23610	7370	2430	2140	2220
MAX	100	48	38	39	46	381	565	575	236	68	78	117
MIN	22	26	32	28	25	28	228	201	45	33	22	22
CAT VD	2006	попат	45700 ME	ז א א ד	10E MAY	0.7	E MTN	1.1	AC EM	00000		

CAL YR 2006 TOTAL 45780 MEAN 125 MAX 875 MIN 11 AC-FT 90800 WTR YR 2007 TOTAL 40155 MEAN 110 MAX 575 MIN 22 AC-FT 79650

MAX DISCH: 623 CFS AT 00:30 ON May. 2, 2007 GH 7.28 FT. SHIFT 0.18 FT. MAX GH: 7.28 FT. AT 00:30 ON May. 2, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.  $\ensuremath{\text{e}}$  - Estimated

### 09131490 MUDDY CREEK ABOVE PAONIA RESERVOIR CO WY2007 HYDROGRAPH



#### GUNNISON RIVER BASIN

#### 09131500 MUDDY CREEK BELOW PAONIA RESERVOIR

LOCATION.--Lat 38°56'26", long 107°21'24" in the SE¼ NW¼ NE¼ sec. 8, T.13 S., R. 89 W. (in Gunnison County on the right hand bank), and about 100 feet above county bridge and about 1100 feet below Paonia Reservoir outlet.

REMARKS.--The primary record is the electronic data from the Sutron SatLink electronic data logger (EDL). Data from the chart record were used to fill in 4 hours of missing DCP data without loss of accuracy. The record is complete, good and reliable, except for the period January 14, to February 9, 2007, when the floats were frozen in the well. This period is estimated and should be considered poor. Mean daily flows above 300 cfs are considered fair, due to a lack of confirming high flow measurements, even though the ramp flume control is considered stable. Station maintained by Steven W. Tuck and Gerald M. Thrush and record developed by Gerald M. Thrush.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- MUDBPRCO09A USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCH	ARGE, IN C		MEAN VALUE		IO SEFIE	MDER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	223	19	51	e55	8.2	281	244	202	47	149	186
2	20	141	19	53	e55	19	211	451	218	43	157	186
3	20	85	19	56	e50	25	214	595	266	40	157	192
4	20	84	2.0	56	e38	25	160	584	267	35	157	192
5	20	83	20	56	e26	25	104	572	261	61	157	192
6	21	74	28	56	e14	25	105	477	266	93	138	191
7	21	68	35	56	e8.0	24	107	412	232	93	109	188
8	21	68	35	56	e8.0	24	108	389	196	93	131	186
9	21	68	35	56	e8.0	24	110	378	176	103	143	182
10	21	68	35	56	9.6	24	111	378	170	108	156	132
11	21	68	35	56	9.0	24	112	352	181	123	164	34
12	21	68	35	56	9.0	49	114	473	207	129	170	35
13	21	68	35	55	9.0	104	115	527	207	129	167	28
14	21	68	36	e55	8.7	193	115	564	177	134	167	24
15	21	40	36	e55	8.6	228	115	585	164	144	167	25
16	21	18	35	e55	9.0	278	116	535	159	157	166	25
17	21	18	36	e55	9.0	327	117	479	151	157	159	25
18	21	18	42	e55	9.0	364	119	441	138	147	158	25
19	87	18	52	e55	9.0	395	120	420	122	148	175	25
20	127	19	52	e55	9.0	395	120	404	109	151	177	25
21	126	19	52	e55	9.0	395	121	391	99	151	183	25
22	124	19	52	e55	9.0	393	122	406	94	151	183	25
23	124	19	52	e55	9.0	391	122	378	84	136	190	26
24	124	19	52	e55	9.0	391	123	307	77	129	195	26
25	124	19	51	e55	9.0	391	124	266	71	129	195	27
26	124	19	51	e55	9.0	388	124	230	65	115	192	27
27	122	19	51	e55	9.0	387	127	217	60	108	192	27
28	122	19	51	e55	9.0	389	127	253	55	99	192	27
29	122	19	51	e55		405	169	293	52	93	192	27
30	193	19	51	e55		433	241	295	51	111	189	34
31	225		51	e55		426		315		134	189	
TOTAL	2116	1555	1224	1709	432.9	6969.2	4074	12611	4577	3491	5216	2369
MEAN	68.3	51.8	39.5	55.1	15.5	225	136	407	153	113	168	79.0
AC-FT	4200	3080	2430	3390	859	13820	8080	25010	9080	6920	10350	4700
MAX	225	223	52	56	55	433	281	595	267	157	195	192
MIN	19	18	19	51	8.0	8.2	104	217	51	35	109	24
CAL YR	2006	TOTAL	45766.3	MEAN	125 MAX	ζ 87	78 MIN	7.5	AC-FT	90780		

MAX DISCH: 820 CFS AT 11:15 ON Jun. 13, 2007 GH 6.14 FT. SHIFT -0.04 FT. MAX GH: 6.14 FT. AT 11:15 ON Jun. 13, 2007

127 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.  $\ensuremath{\text{e-Estimated}}$ 

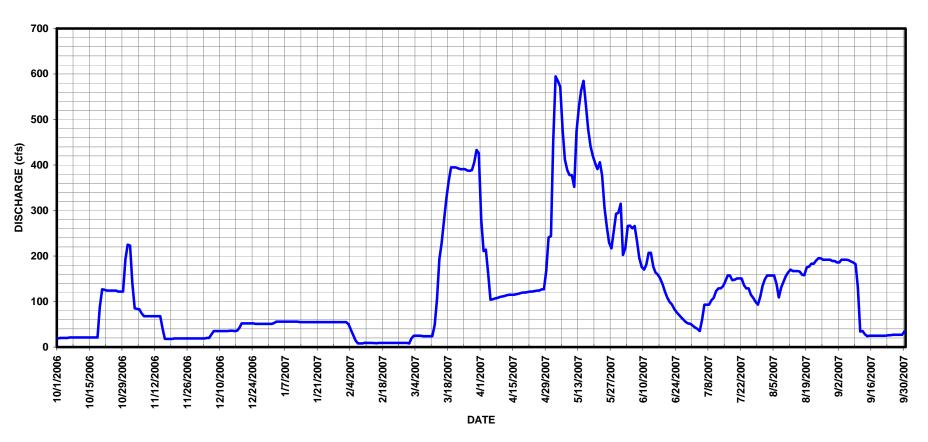
TOTAL 46344.1 MEAN

WTR YR 2007

595 MIN

8 AC-FT

# 09131500 MUDDY CREEK BELOW PAONIA RESERVOIR CO WY2007 HYDROGRAPH



#### GUNNISON RIVER BASIN

#### ABC LATERAL NEAR MONTROSE, CO

LOCATION.--Lat 38°29'06", long 107°44'57", in SE14 NE14 NE14 sec. 27, T.49 N., R.8 W., Montrose County, on left bank of canal 270 ft. below takeout from South Canal, such takeout being 1700 ft. below the west portal of the Gunnison Tunnel.

GAGE. -- Sutron Satlink 2 HDR data collection platform with shaft encoder and strip chart recorder (Stevens A35) in a 36-in. diameter CMP shelter over a 24-in diameter CMP stilling well. The recorder and shaft encoder operate from separate floats and are set to an inside drop tape referenced to an adjustable RP on the instrument shelf. The primary record is electronic data from the DCP and shaft encoder with the chart serving as backup. An An SDI-12 radio bridge communicates with and collects gage height data from the South Canal gage.

REMARKS.--The record is complete, good and reliable, except for the period February 19-27, 2007, when the stagedischarge relationship was effected by backwater from the down stream gates being closed, which is poor. The operating period of the canal was from Oct. 01, 2006 to Oct. 27, 2006 and from Apr. 2, 2007 through Sep. 30, 2007. The intervening winter period, consisted of seepage from the Gunnison Tunnel. This winter shut down period is a normal operational occurrence. This year there were twelve occurrences of increased flow during winter shutdown period. These were periods when the Gunnison Tunnel was turned on to fill Fairview Reservoir and the AB Lateral head gate was left open. The AB and C Drop aka the AB Lateral Canal is part of the Gunnison Tunnel complex. The South Canal is the other part. The two structures are combined to account for the total diversion through the Gunnison Tunnel. Station maintained and record developed by Gerald M. Thrush.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

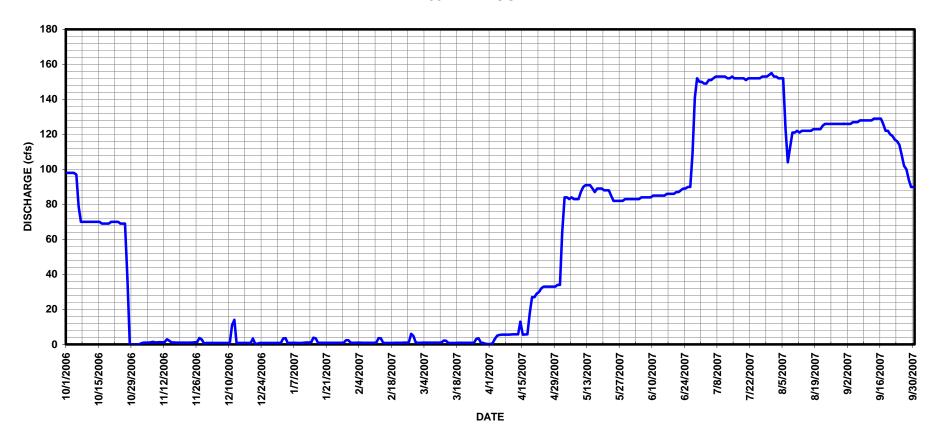
RATING TABLE. -- ABCLATCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	AN VALU	ES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	0	.81	.81	.92	.92	.20	34	83	150	153	126
2	98	.64	.81	3.4	.92	.90	.67	64	83	149	153	126
3	98	1.0	.81	3.6	.98	1.0	3.1	84	83	149	152	126
4	98	1.0	.81	.77	1.0	1.0	5.0	84	83	151	152	127
5	97	1.0	.81	.81	.95	1.0	5.4	83	84	151	152	127
6	79	1.2	.81		.92	1.0	5.6	84	84	152	123	127
7	70	1.5	.81		.92	1.0	5.6	83	84	153	104	128
8	70	1.1	.81		.92	1.0	5.6	83	84	153	113	128
9	70	1.2	.81		.92	1.0	5.6	83	84	153	121	128
10	70	1.3	.81		.95	1.0	5.7	87	85	153	121	128
11	70	1.2	11		.92	1.0	5.8	90	85	153	122	128
12	70	1.3	14	1.1	3.6	2.2	5.8	91	85	152	121	128
13	70	2.9	.53		3.5	2.1	5.8	91	85	152	122	129
14	70	2.1	.81		.81	.86	13	91	85	153	122	129
15	70	1.1	.81		.81	.84	5.6	89	85	152	122	129
16	69	1.1	.81		.81	.82	5.7	87	86	152	122	129
17	69	1.0	.81		.81	.84	5.8	89	86	152	122	126
18	69	1.0	.81		.81	.87	18	89	86	152	123	122
19	69	1.0	.81		e.90	.88	27	89	86	152	123	122
20	70	1.0	3.3		e.90	.92	27	88	87	151	123	120
21	70	1.0	.31		e.90	.92	29	88	87	152	123	119
22	70	1.0	.50		e.90	.92	30	88	88	152	125	117
23	70	1.0	.81		e1.0	.87	32	85	89	152	126	116
24	69	1.1	.81		e1.0	.88	33	82	89	152	126	114
25	69	1.2	.81		e1.0	.81	33	82	90	152	126	108
26	69	1.3	.81		e6.0	3.1	33	82	90	152	126	102
27 28	38 0	3.7	.81		e4.8	3.5	33	82	109	153 153	126	100 94
28 29		2.7	.81		e.97	.98 .86	33 33	82 83	141 152	153	126 126	94
30	0	.81	.81			.86	33	83	152	153	126	90
31	0	.01	.81			.16		83	150	154	126	
31	U		.01	.90		.10		0.3		133	120	
TOTAL	1999	37.92	49.89	41.89	39.84	34.54	484.97	2583	2778	4715	3948	3583
MEAN	64.5	1.26	1.61	1.35	1.42	1.11	16.2	83.3	92.6	152	127	119
AC-FT	3970	75	99	83	79	69	962	5120	5510	9350	7830	7110
MAX	98	3.7	14	3.8	6.0	3.5	34	91	152	155	153	129
MIN	0	0	.31	.77	.81	.16	.20	34	83	149	104	90
CAL YR	2006		25364.59	MEAN	69.5 MAX		61 MIN		AC-FT	50310		
WTR YR	2007	TOTAL 2	20295.05	MEAN	55.6 MAX	1	55 MIN	0	AC-FT	40260		

MAX DISCH: 233 CFS AT 09:15 ON Jun. 28, 2007 GH 4.01 FT. SHIFT -0.06 FT. MAX GH: 4.01 FT. AT 09:15 ON Jun. 28, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

### ABC LATERAL NEAR MONTROSE CO WY2007 HYDROGRAPH



## GUNNISON RIVER BASIN

#### SOUTH CANAL NEAR MONTROSE, CO

LOCATION.--Lat 38°29'01", long 107°45'20", in NE4 SW4 NE4 sec 27, T.49 N., R.8 W., Montrose County, on right bank of canal approximately 3600 ft. below the west portal of the Gunnison Tunnel.

GAGE.--An SDI-12 shaft encoder and a strip chart recorder (Stevens A35) in a 42 inch CMP shelter and well. The shaft encoder is connected via an SDI-12 radio bridge to the DCP located at the AB Lateral shelter. The recorder and shaft encoder operate from separate floats. They are set to an inside drop tape. A Sutron stage discharge recorder replaced the shaft encoder on Feb. 13, 2007.

REMARKS.--The primary record is 15-minute data from the DCP electronic data logger file. The record is complete, reliable, and good. There were several instances when one or two 15 minute values weren't transmitted to, or received by, the DCP at the AB Lateral. These sporadic values of zero were verified and corrected using the chart record with no loss of accuracy. There are periods, just after the fall shut down and after the 11 runs during the winter when there is a small amount of water observed below the level of the inlets. These trailing off values are below the 5% threshold of the total mean winter values and have been ignored as miniscule bank storage. Station maintained and record developed by Gerald M. Thrush.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- SOUCANCO16A USED FROM 01-OCT-2006 TO 30-SEP-2007

					MEAN	VALUES			
Y	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN

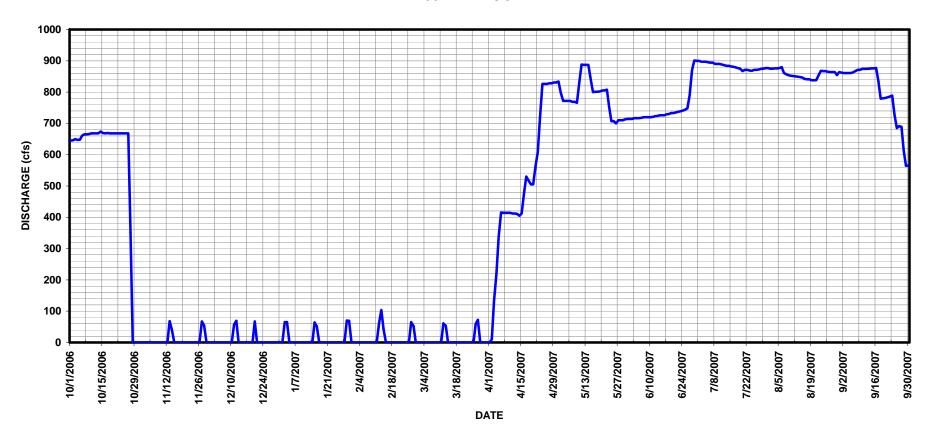
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	645	0	0	0	0	0	0	834	714	900	875	862
2	646	0	0	65	0	0	10	798	714	897	875	861
3	650	0	0	65	0	0	133	772	717	897	876	861
4	647	0	0	0	0	0	220	772	717	897	876	861
5	648	0	0	0	0	0	338	772	717	895	877	861
6	661	0	0	0	0	0	415	772	718	894	880	863
7	665	0	0	0	0	0	414	769	720	894	861	867
8	665	0	0	0	0	0	414	769	720	890	857	871
9	666	0	0	0	0	0	414	766	720	890	854	871
10	668	0	0	0	0	0	414	831	720	890	852	874
11	668	0	58	0	0	0	412	888	721	888	851	874
12	668	0	69	0	62	61	412	887	723	886	850	874
13	668	68	0	0	104	53	411	887	724	884	849	875
14	674	41	0	0	42	0	405	887	726	884	848	876
15	669	0	0	64	0	0	412	840	726	882	846	876
16	668	0	0	51	0	0	477	800	726	881	842	877
17	669	0	0	0	0	0	530	801	729	879	841	836
18	668	0	0	0	0	0	517	801	730	877	841	779
19	668	0	0	0	0	0	505	802	733	874	838	780
20	668	0	67	0	0	0	505	805	733	867	838	781
21	668	0	0	0	0	0	564	805	735	871	838	783
22	668	0	0	0	0	0	609	808	737	871	854	786
23	668	0	0	0	0	0	728	752	739	869	868	789
24	668	0	0	0	0	0	826	707	741	868	867	729
25	668	0	0	0	0	0	826	707	744	871	867	685
26	668	0	0	0	65	60	826	700	748	871	865	691
27	351	67	0	0	52	72	828	710	790	872	864	689
28	0	54	0	0	0	0	828	710	870	874	864	613
29	0	0	0	70		0	831	710	901	875	864	565
30	0	0	0	69		0	831	713	900	877	855	565
31	0		0	0		0		714		877	864	
TOTAL	17608	230	194	384	325	246	15055	24289	22353	27342	26597	23975
MEAN	568	7.67	6.26	12.4	11.6	7.94	502	784	745	882	858	799
AC-FT	34930	456	385	762	645	488	29860	48180	44340	54230	52760	47550
MAX	674	68	69	70	104	72	831	888	901	900	880	877
MIN	0	0	0	0	0	0	0	700	714	867	838	565
CAL YR	2006	TOTAL	174600	MEAN	478 MAX	99	99 MIN		AC-FT	346300		

CAL YR 2006 TOTAL 174600 MEAN 478 MAX 999 MIN 0 AC-FT 346300 WTR YR 2007 TOTAL 158598 MEAN 435 MAX 901 MIN 0 AC-FT 314600

MAX DISCH: 1060 CFS AT 02:45 ON Aug. 6, 2007 GH 4.39 FT. SHIFT -1.13 FT. MAX GH: 4.39 FT. AT 02:45 ON Aug. 6, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# SOUTH CANAL NEAR MONTROSE CO WY2007 HYDROGRAPH



#### GUNNISON RIVER BASIN

# UNCOMPAHGRE RIVER NEAR OLATHE, CO

LOCATION.--Lat 38°36'5", long 107°58'58", SW4S W4 of NW4 sec. 15, T.50 N., R. 10W, NMPM, and about 3,100 ft. above the S. H. 348 bridge and about 5,100 ft below the East Canal headgate and diversion structure, both stream distance. The gage is on the right bank and in Montrose County.

## DRAINAGE AREA. -- N/A

GAGE. -- Stevens A35 graphic recorder and Sutron SatLink 2 with shaft encoder in a 48" spiral culvert and stilling well. Graphic water recorder and shaft encoder are both activated by separate floats in the stilling well. The primary reference gage is a steel drop tape referenced to an adjustable RP located in the gage.

REMARKS.--Primary record is 5-minute DCP log data with the graphic chart recorder and satellite data used for backup purposes. This record is complete, reliable and good, except for Dec 3-9, 2006, when the floats in the stilling well were temporarily frozen, and, Nov. 29-30, Dec. 1-2, 2006, Jan 6-9, 15-26, Feb. 1-3, Mar 1-4, 2007, when ice in the channel affected the stage-discharge relationship. These periods were estimated and are considered poor. Station maintained by Div IV staff and record developed by Gerald M.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

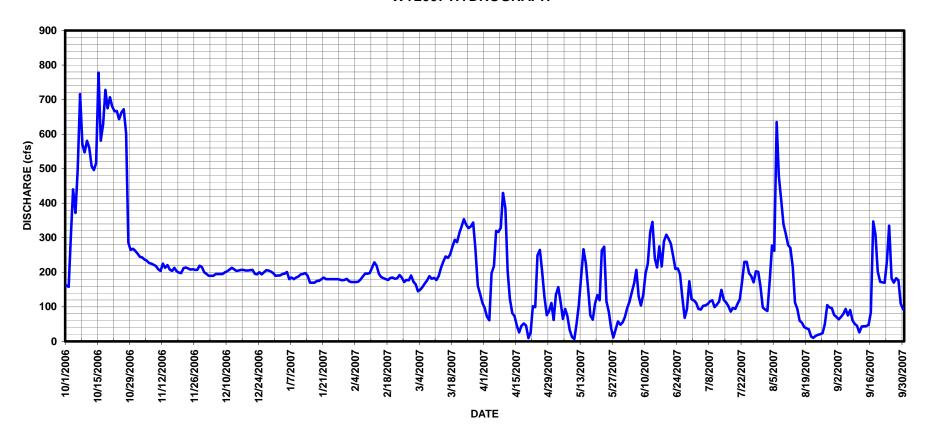
RATING TABLE. -- UNCOLACO08A USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCH	ARGE, IN CI	ME	AN VALU		IO SEFIE	MDER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	254	e195	191	e174	e173	97	62	70	119	92	71
2	158	245	e190	191	e172	e165	72	135	97	111	88	64
3	308	243	e190	195	e172	e145	61	157	115	94	179	71
4	440	237	e190	196	172	e150	198	116	143	92	278	79
5	372	234	e195	201	173	158	218	65	168	103	262	94
6	499	227	e195	e180	179	168	320	94	207	104	635	75
7	716	225	e195	e185	188	177	317	74	130	108	478	91
8	571	222	e195	e180	196	189	329	33	104	116	408	61
9	547	218	e200	e185	196	181	430	13	136	119	339	51
10	581	209	203	188	198	184	385	6.9	197	99	312	45
11	561	204	208	194	213	178	204	52	225	106	279	26
12	507	225	213	195	229	189	123	106	316	116	271	43
13	496	213	209	198	219	212	82	191	346	149	216	44
14	516	221	204	190	195	231	73	267	240	120	112	44
15	778	208	205	e170	186	246	45	225	214	113	95	48
16	581	204	207	e170	183	242	26	152	275	103	60	84
17	630	213	207	e170	180	252	45	75	217	86	54	347
18	728	203	205	e175	178	274	52	63	290	97	41	309
19	675	199	205	e175	184	294	46	109	309	94	38	203
20	707	198	206	e180	185	287	9.8	134	297	109	35	173
21	680	212	207	e185	181	315	27	119	283	122	14	171
22	666	214	196	e180	183	333	102	263	247	176	10	170
23	667	211	194	e180	192	354	99	274	210	230	16	233
24	643	208	200	e180	184	337	249	116	211	230	19	335
25	663	209	194	e180	172	328	265	85	194	198	21	183
26	672	207	200	e180	178	333	203	39	129	189	24	170
27	602	207	206	180	177	344	131	11	68	171	50	183
28	286	219	205	179	191	268	76	35	93	203	105	177
29	265	e215	202	177		161	87	58	174	201	98	110
30	268	e200	198	178		138	111	48	122	158	97	93
31	262		190	181		111		55		98	77	
TOTAL	16207	6504	6209	5689	5230	7117	4482.8	3232.9	5827	4134	4803	3848
MEAN	523	217	200	184	187	230	149	104	194	133	155	128
AC-FT	32150	12900	12320	11280	10370	14120	8890	6410	11560	8200	9530	7630
MAX	778	254	213	201	229	354	430	274	346	230	635	347
MIN	158	198	190	170	172	111	9.8	6.9	68	86	10	26
CAL YR	2006	TOTAL 5	8341.17	MEAN	160 MAX	7	78 MIN	0.68	AC-FT	115700		
WTR YR	2007	TOTAL	73283.7	MEAN	201 MAX	7	78 MIN	6.9	AC-FT	145400		

MAX DISCH: 1140 CFS AT 15:45 ON Aug. 6, 2007 GH 5.14 FT. SHIFT -0.20 FT. MAX GH: 5.14 FT. AT 15:45 ON Aug. 6, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

# UNCOMPAHGRE RIVER NEAR OLATHE CO WY2007 HYDROGRAPH



## GUNNISON RIVER BASIN

#### REDLANDS CANAL NEAR GRAND JUNCTION, CO

- LOCATION.--Lat 39°01'49", long 108°33'51", in NW4 SW4 NW4 Sec 35, T1S, R1W, Mesa County, on the right bank of canal 650 ft. below the Redlands diversion dam until Oct. 25, 2004. Beginning Apr. 1, 2005, Lat 39°02'52.93", long 108°34'33.16", in the NE4 NW4NE4 Sec 27, T1S, R1W on the right bank just downstream of and attached to an old bridge.
- GAGE. -- A Sutron 9210 DCP with Modbus capabilities, Channel Master Acoustic Doppler Velocity Meter (ADVM) and a Sutron AccuBubble set to an outside staff gage. The Channel Master ADVM has the ability to give instantaneous flow readings. It produces the primary discharge record. A Sutron Satlink Logger 2 is controlled by the Sutron 9210 DCP and acts as the GOES radio transmitter. An LOS radio to a USBR programmable logic controller, enables control at the canal head gate. The LOS radio and Satlink Logger 2 are connected to the 9210 via serial cables and communication ports. The Satlink 2 is capable of logging data and as such can be used as an emergency back up for the 9210, but without the capabilities to use the LOS radio. The data logging and control/communication are normally performed by the 9210. The Channel Master and AccuBubble are connected to the 9210 DCP via SDI-12 communication. The Sutron AccuBubble continues to operate as a back up and cross check only.
- REMARKS.--Directly measured flow from the ADVM started on October 1, 2006 and continued until July 29, 2007, when the Channel Master separated from its wooden mounting plate in the channel. There were several periods before the mounting plate came loose, when there were problems with the instrument, and communication or transmission of data. These periods were January 24-26, February 8-9, 17, April 1, 7-10, 2007. The Channel Master was removed from the mounting plate on July 29, 2007. Daily mean flows for the remainder of the water year, from July 29 to September 30, 2007, were estimated, with the stage from the Accububble used for general comparison only.

The missing data were estimated using power generation records supplied by Redlands Water and Power Canal Company. These data are total kilowatts generated in a 24-hour period, based on a reading taken daily at about 1500 hours. An Excel spreadsheet was used to average the day before and after with the subject day. This mid-point value was compared to the ADVM mean daily value for that same subject day and a correlation developed. The correlation varies throughout the year. This may be caused by the operating efficiency of the generator, the amount of bypass water spilling over check boards, and several other operational factors.

The record is rated good when the ADVM was operating from October 1, 2006 until July 29, 2007, except for the periods before the mounting plate came loose and there were communication or transmission problems with the ADVM. The power generation/flow correlation was used to estimate mean daily flows on January 24-26, February 8, 9, and 17, April 1, 7-10, 2007. These are rated poor. Adjacent good record and partial day mean values were used to fill and estimate mean daily flow values on February 24, June 16, 20, 26 and July 26, 2007. These are rated fair. The period from July 29 to September 30, 2007 was estimated using power generation/flow correlation and is rated poor.

Station maintained and record developed by  ${\tt Gerald\ M.\ Thrush.}$ 

# REDLANDS CANAL NEAR GRAND JUNCTION CO

RATING TABLE.--STCONVERT USED FROM 01-OCT-2006 TO 30-SEP-2007

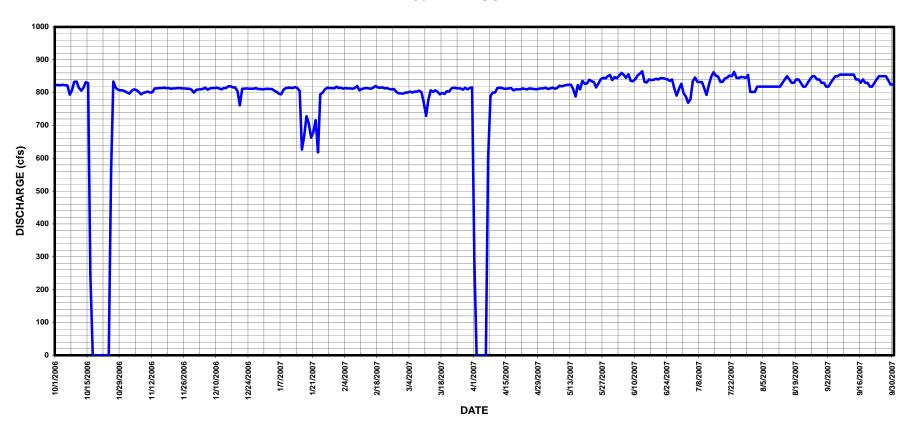
# DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

	MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	823	800	808	812	814	797	e290	813	847	799	e802	e818	
2	823	797	810		815	800	0	815	844	788	e818	e818	
3	822	806	810		812	800	0	811	852	769	e818	e830	
4	824	810	812	806	814	803	0	813	860	780	e818	e840	
5	822	808	815	802	813	800	0	815	854	835	e818	e850	
6	822	802	809	797	813	803	0	812	845	846	e818	e850	
7	794	795	813	795	812	803	e600	814	856	833	e818	e855	
8	807	799	814	809	e814	806	e790	821	836	832	e818	e855	
9	833	801	814	814	e820	801	e800	819	835	832	e818	e855	
10	834	803	815	815	807	770	e800	821	841	813	e818	e855	
11	815	800	813	815	811	729	814	823	852	793	e818	e855	
12	806	801	810	814	813	778	815	824	858	824	e818	e855	
13	815	813	814	817	814	807	814	824	865	848	e830	e855	
14	832	813	814	814	813	802	812	811	833	862	e840	e840	
15	829	814	819	805	812	807	812	788	831	852	e850	e840	
16	248	814	819		815	802	813	823	e840	849	e840	e830	
17	0	815	816		e820	795	814	810	838	833	e830	e840	
18	0	814	816		816	799	807	836	839	833	e830	e830	
19	0	814	804		815	796	810	827	842	843	e840	e830	
20	0	812	761		816	804	810	828	e840	846	e840	e818	
21	0	813	812		813	803	810	839	844	852	e830	e818	
22	0	813	812		814	813	813	835	844	850	e818	e830	
23	0	814	813		811	815	811	832	842	863	e818	e840	
24	0	814	812		e810	814	810	816	840	845	e830	e850	
25	558	813	812		811	813	813	829	836	844	e840	e850	
26	834	813	812		803	813	812	841	e840	e848	e850	e850	
27	815	812	814		798	809	811	845	811	847	e850	e850	
28	809	812	811		798	815	810	843	791	845	e840	e838	
29	807	809	811			810	812	850	812	e854	e840	e825	
30	807	800	810			814	813	854	827	e802	e830	e825	
31	804		811	818		816		838		e802	e830		
TOTAL	17983	24244	25136		22737	24837	19516	25570	25195	25762	25676	25195	
MEAN	580	808	811		812	801	651	825	840	831	828	840	
AC-FT	35670	48090	49860		45100	49260	38710	50720	49970	51100	50930	49970	
MAX	834	815	819		820	816	815	854	865	863	850	855	
MIN	0	795	761	618	798	729	0	788	791	769	802	818	
CAL YR	2006	TOTAL	282261	MEAN	773 MAX	84	4 MIN	0	AC-FT	559900			
WTR YR	2007	TOTAL	285870	MEAN	783 MAX	86			AC-FT	567000			

MAX DISCH: 905 CFS AT 06:00 ON Jul. 29, 2007 VertBeam 7.50 FT. SHIFT 0 FT. MAX GH: 7.73 FT. AT 12:45 ON Apr. 07, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.  $\ensuremath{\mathrm{e}}$  - Estimated

# REDLANDS CANAL NEAR GRAND JUNCTION CO WY2007 HYDROGRAPH



(THIS PAGE INTENTIONALLY LEFT BLANK)

## GUNNISON RIVER BASIN

#### GUNNISON RIVER BELOW REDLANDS DIVERSION DAM NEAR GRAND JUNCTION, CO

LOCATION.-- Lat 39°02'17", long 108°34'13", in SW4 SW4 sec 26, T1S, R1W, Mesa County, on the right bank of the 108°34'13".Gunnison River just up stream of the Department of Energy Compound, about 1.6 miles above the mouth and the Colorado River, and about 0.78 miles below the Redlands Canal Diversion Dam.

GAGE.--Sutron SatLink Logger high data rate DCP controlling a Sutron accububble in a 48-inch diameter CMP shelter on a concrete pad. There is no back up strip chart. The primary reference is an outside cantilever chain gage which can be used at low gage readings if the bank is trenched; it is used up to gage height 13.00 ft. The secondary gage is a section of staff gage that is carried to and placed at the top of the brass nut at the end of the orifice line. Gage height of the brass nut is 0.70 ft. This is used to calibrate the AccuBubble at extremely low flows.

REMARKS. -- The primary record is the electronic data from the Sutron SatLink Logger. The record is complet and reliable. The record is rated good, except for the periods: November 29-30, December 1-6, 21-24, 2006, January 6-9, 14-24, and February 2-3, 2007, when the stage-discharge relationship was affected by ice. These periods were estimated and are considered poor. Station maintained and record developed by Gerald M. Thrush.

RATING TABLE. -- GUNREDCO04 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	1210	1140	e1300	1400	1340	625	2470	2330	1390	362	513	815	
2	1180	1090	e1300	1400	e1100	568	2600	2490	1320	352	541	827	
3	1210	999	e1340	1330	e1000	503	2620	3100	1320	313	553	847	
4	2060	916	e1340	1370	1090	528	2690	3030	1430	286	800	835	
5	1690	899	e1350	1480	1090	584	2870	2820	1440	337	988	878	
6	2720	887	e1380	e1380	984	616	3120	2720	1500	361	1370	920	
7	4250	860	1450	e1350	933	645	2660	2330	1580	376	1960	895	
8	2700	823	1460	e1340	960	688	2400	1970	1300	378	1620	986	
9	2130	815	1460	e1350	999	770	2710	1780	1050	384	1350	1050	
10	2350	800	1470	1390	1000	700	2780	1670	963	354	1250	1070	
11	2220	776	1500	1420	1050	737	2460	1660	1100	338	1120	1020	
12	2040	775	1450	1450	1120	675	2050	1940	1220	380	1040	1010	
13	1880	845	1430	1470	1080	669	1930	2560	1810	439	999	1010	
14	1780	790	1480	e1280	879	914	1680	3040	1580	500	842	1010	
15	1980	1160	1480	e1260	669	1340	1500	3330	1360	467	796	1020	
16	2800	1250	1500	e1250	623	1620	1490	3110	1280	451	846	1050	
17	3070	1250	1510	e1240	620	1780	1490	2750	1290	410	854	1740	
18	3680	1270	1500	e1260	592	2060	1470	2390	1210	406	894	2330	
19	3050	1230	1520	e1280	589	2370	1380	2240	1100	436	868	1870	
20	2740	1210	1570	e1320	635	2550	1230	2210	938	446	853	1600	
21	2670	1210	e1380	e1340	623	2620	1160	2240	831	472	782	1530	
22	2580	1220	e1350	e1340	595	2490	1290	2160	765	512	719	1490	
23	2500	1220	e1300	e1360	606	2310	1250	2650	678	604	669	1750	
24	2450	1220	e1350	e1360	634	2250	1200	2180	638	644	661	2380	
25	1910	1210	1420	1370	599	2210	1480	1820	574	616	670	2160	
26	1930	1230	1430	1350	576	2160	1360	1540	537	766	668	1780	
27	1820	1210	1460	1350	552	2210	1200	1350	421	743	727	1710	
28	1630	1180	1500	1360	559 	2500	1150	1290	359	699	881	1520	
29	1220	e1300	1480	1340		2520	1420	1450	370	765	919 870	1230	
30 31	1170	e1300	1460	1260		2240	1960	1580 1430	405	696 594		1040	
31	1160		1420	1310		2040		1430		594	825		
TOTAL	67780	32085	44340	41760	23097	46492	57070	69160	31759	14887	28448	39373	
MEAN	2186	1070	1430	1347	825	1500	1902	2231	1059	480	918	1312	
AC-FT	134400	63640	87950	82830	45810	92220	113200	137200	62990	29530	56430	78100	
MAX	4250	1300	1570	1480	1340	2620	3120	3330	1810	766	1960	2380	
MIN	1160	775	1300	1240	552	503	1150	1290	359	286	513	815	

MAX DISCH: 5560 CFS AT 02:00 ON Oct. 7, 2006 GH 6.29 FT. SHIFT -0.15 FT. MAX GH: 6.29 FT. AT 02:00 ON Oct. 7, 2006

1357 MAX

1360 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e - Estimated

495459 MEAN

496251 MEAN

CAL YR 2006

WTR YR 2007

TOTAL

TOTAL

4360 MIN

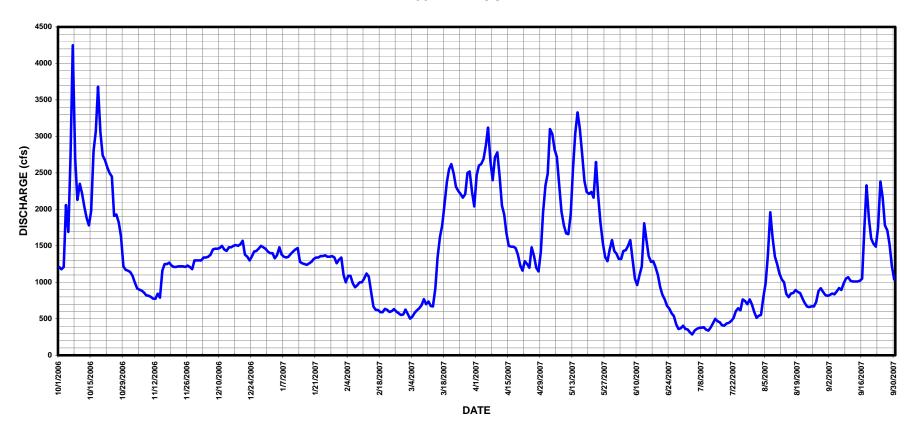
4250 MIN

168 AC-FT

286 AC-FT

982700

# GUNNISON RIVER BELOW REDLANDS DIVERSION DAM NEAR GRAND JUNCTION CO WY2007 HYDROGRAPH



#### BLUE RIVER BASIN

# BLUE RIVER AT HIGHWAY 9 BRIDGE BELOW BRECKENRIDGE, CO

LOCATION.--Lat 39°32'29", long 106°02'40", in SE4 SW4 Sec. 7, T6S, R77W, Hydrologic Unit 14010004 in Summit County. Located on right bank 25 ft. above Highway 9 Bridge, 3 1/2 miles north of Breckenridge and 2 1/4 miles south of Dillon Reservoir(Blue River Arm).

DRAINAGE AREA. -- N/A.

GAGE.--Graphic water-stage recorder and satellite telemetry system (Sutron HDR 8210 DCP and shaft encoder) in precast concrete building. Well inside building has two intake pipes with flush risers outside. Recorder and shaft encoder are set by inside drop tape from adjustable reference point on instrument shelf. Primary record is satellite data and chart record is used for backup. AC power was installed in station in 2005. Control is rock and cobble riffle(low flows) and 8' culverts(high flows). Elevation of gage is 9180 ft. from topographic map.

REMARKS.--Record is complete and reliable, except for the period: June 18-19, 2007, when the upper intake pipe was partially or fully clogged. Upstream transmountain diversions occur through the Continental-Hoosier Tunnel and Boreas Pass Ditch. Record is good, except for period of intake pipe clogging, when record is fair. Station maintained by George Wear, James Kellogg, and Scott Hummer. Record developed by Craig Bruner.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- BLUNINCO08 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	46	37	23	22	19	17	33	113	245	182	57	50		
2	46	34	24	22	18	17	33	114	241	166	63	51		
3	46	32	24	22	18	17	34	125	252	154	92	56		
4	45	33	24	22	17	18	34	115	266	152	118	63		
5	40	34	23	22	17	18	36	121	292	150	115	53		
6	40	32	24	21	17	18	37	108	325	150	108	51		
7	39	32	25	21	17	18	38	96	313	143	110	50		
8	40	34	25	22	17	19	38	90	271	143	112	50		
9	39	36	25	22	17	19	39	87	254	134	96	46		
10	39	37	25	22	17	19	39	88	260	120	81	44		
11	43	34	25	22	17	19	38	95	282	110	73	44		
12	47	32	25	22	17	19	36	114	331	101	67	43		
13	46	33	24	22	17	20	36	145	393	95	68	41		
14	43	30	24	23	17	21	36	160	358	90	68	40		
15	45	30	25	24	17	22	36	169	356	86	69	40		
16	46	28	25	23	17	22	37	199	391	83	88	40		
17	47	27	26	22	17	22	38	251	453	78	126	46		
18	48	28	25	22	17	24	39	256	473	78	134	60		
19	47	28	24	22	17	24	41	261	414	89	116	62		
20	42	26	24	22	17	25	42	264	349	93	102	52		
21	40	27	23	21	17	29	43	271	313	101	84	43		
22	41	31	23	21	17	33	45	256	297	106	74	42		
23	43	34	22	20	17	34	46	229	288	94	68	40		
24	39	34	22	20	17	34	48	233	283	82	70	40		
25	38	32	22	19	17	34	51	218	269	76	66	40		
26	40	29	22	19	17	34	52	199	252	74	60	40		
27	40	27	22	19	17	35	49	206	229	70	57	40		
28	40	25	22	19	17	36	52	234	204	69	56	37		
29	37	24	22	19		36	60	271	191	67	52	34		
30	37	23	22	19		34	83	296	188	69	51	32		
31	38		22	19		34		265		69	49			
TOTAL	1307	923	733	657	480	771	1269	5649	9033	3274	2550	1370		
MEAN	42.2	30.8	23.6	21.2	17.1	24.9	42.3	182	301	106	82.3	45.7		
AC-FT	2590	1830	1450	1300	952	1530	2520	11200	17920	6490	5060	2720		
MAX	48	37	26	24	19	36	83	296	473	182	134	63		
MIN	37	23	22	19	17	17	33	87	188	67	49	32		

MAX DISCH: 505 CFS AT 19:45 ON Jun. 17, 2007 GH 2.55 FT. SHIFT -0.04 FT. MAX GH: 2.55 FT. AT 19:45 ON Jun. 17, 2007

64.9 MAX

76.8 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

23677 MEAN

28016 MEAN

CAL YR 2006

WTR YR 2007

TOTAL

TOTAL

276 MIN

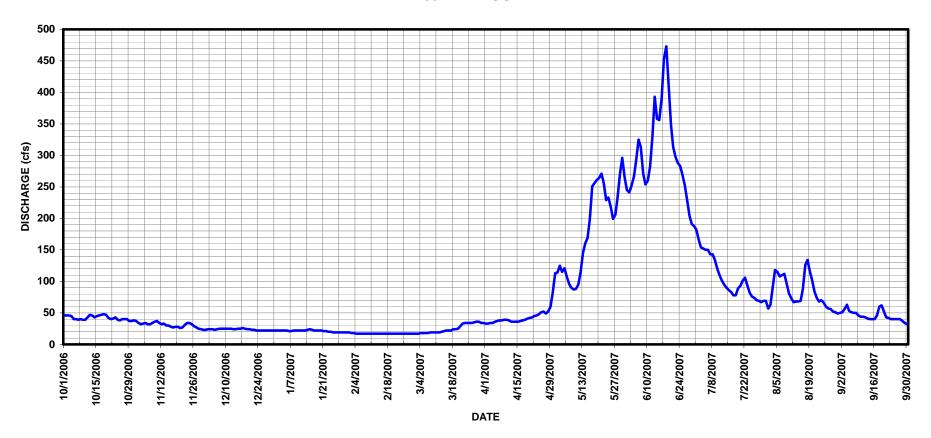
473 MTN

14 AC-FT

17 AC-FT

46960

# BLUE RIVER AT HIGHWAY 9 BRIDGE BELOW BRECKENRIDGE CO WY2007 HYDROGRAPH



#### BLUE RIVER BASIN

# SNAKE RIVER AT KEYSTONE SKI AREA, CO

LOCATION.--Lat 39°36′24″, long 105°57′06″, in NE1/4 NE1/4 Sec. 24, T5S, R77W in Summit County. Located on left bank just below Keystone Ski Area snowmaking diversion, 0.5 mi below confluence with North Fork of Snake River, 1.5 mi above confluence with Keystone Gulch, and 3.2 mi upstream of Snake River Arm of Dillon Reservoir.

DRAINAGE AREA. -- N/A.

GAGE.--Sutron Accububble sensor located in the gage pool downstream of the Keystone Ski Area snowmaking diversion. Accububble is wired to a Sutron 8210 DCP inside the pumphouse for snowmaking operations. The accububble is referenced to an outside staff gage below the snowmaking diversion point. Satellite data is primary record. Control is a "W"-shaped rock weir approximately 20 feet below the gage.

REMARKS.--Record is complete and reliable, except for the first half of October and the entire month of March. The Accububbler was not installed in the station until October 13<sup>th</sup>. Discharge for the first half of October was estimated as a percentage of USGS SNAMONCO station approximately 1 mile upstream. Bubbler operation and DCP transmission problems resulted in bad data for most of March. Record includes bypass water (pumped from Montezuma shaft of Roberts Tunnel) that is not diverted for snowmaking. Record is rated fair for Oct 14-31 and Mar. 1-3, 7, 8, 10, 30, and 31, and good for Nov. through Feb. During the estimated periods: Oct. 1-13, 2006; Mar 4-6, 9 and 11-29, 2007, the record is rated as poor. Record is published as a partial year record (Oct 1-Mar 31) only. Station was maintained by George Wear and James Kellogg and record was developed by Craig Bruner.

RATING TABLE. -- SNAKEYCO12 USED FROM 01-OCT-2006 TO 31-MAR-2007

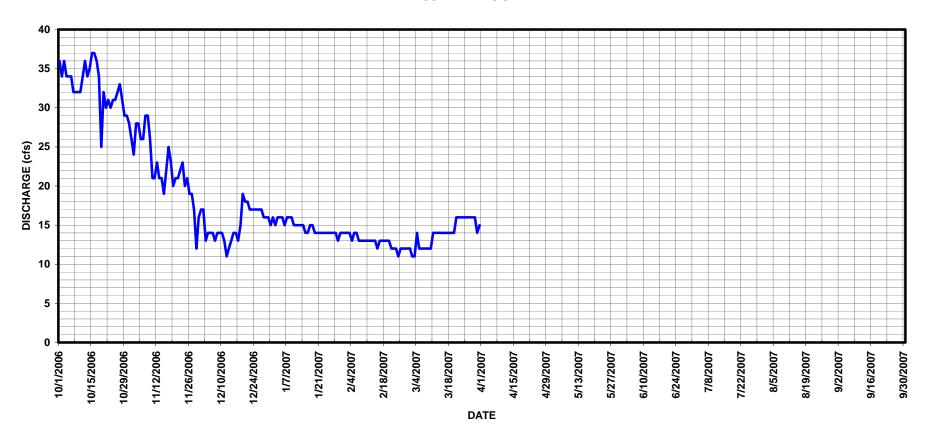
DISCHARGE,	IN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007
			1	MEAN V	/ALUES				

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e36	26	17	16	14	12						
2	e34	24	17	15	14	11						
3	e36	28	13	16	14	11						
4	e34	28	14	16	13	e14						
5	e34	26	14	16	14	e12						
6	e34	26	14	15	14	e12						
7	e32	29	13	16	13	12						
8	e32	29	14	16	13	12						
9	e32	26	14	16	13	e12						
10	e32	21	14	15	13	12						
11	e34	21	13	15	13	e14						
12	e36	23	11	15	13	e14						
13	e34	21	12	15	13	e14						
14	35	21	13	15	13	e14						
15	37	19	14	14	12	e14						
16	37	22	14	14	13	e14						
17	36	25	13	15	13	e14						
18	34	23	15	15	13	e14						
19	25	20	19	14	13	e14						
20	32	21	18	14	13	e14						
21	30	21	18	14	12	e16						
22	31	22	17	14	12	e16						
23	30	23	17	14	12	e16						
24	31	20	17	14	11	e16						
25	31	21	17	14	12	e16						
26	32	19	17	14	12	e16						
27	33	19	17	14	12	e16						
28	31	17	16	14	12	e16						
29	29	12	16	13		e16						
30	29	16	16	14		14						
31	28		15	14		15						
TOTAL	1011	669	469	456	359	433						
MEAN	32.6	22.3	15.1	14.7	12.8	14.0						
AC-FT	2010	1330	930	904	712	859						
MAX	37	29	19	16	14	16						
MIN	25	12	11	13	11	11						
CAL YR	2006	TOTAL	3141.7	MEAN	17.3 MAX	29	MIN	7.5 AC-FT		6230 (PARTIA	L YEAR	RECORD)
WTR YR	2007	TOTAL	3397	MEAN	18.9 MAX	37	MIN	11 AC-FT		6740 (PARTIA	L YEAR	RECORD)

MAX DISCH: 47.9 CFS AT 15:45 ON Oct. 23, 2006 GH 2.20 FT. SHIFT 0.00 FT. MAX GH: 2.20 FT. AT 15:45 ON Oct. 23, 2006

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e - Estimated

# SNAKE RIVER AT KEYSTONE SKI AREA CO WY2007 HYDROGRAPH



#### ROARING FORK RIVER BELOW MAROON CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°13'30", long 106°51'20", NW4 SW4 Sec. 35, T9S, R85W in Pitkin County. Located on left bank at Aspen Consolidated Sanitation Plant 0.5 mi east of Aspen Airport and 0.8 mi downstream from confluence of Maroon Creek.

DRAINAGE AREA. --N/A.

WTR YR 2007

GAGE.--Graphic water-stage recorder, shaft encoder, and Sutron 8004 satellite telemetry system in precast concrete building over stilling well. Recorder and shaft encoder are set by inside drop tape from adjustable reference point on instrument shelf. Primary record is satellite data and chart record is used for backup. Control is a rock and cobble riffle (low flows) and boulders (high flows). Elevation of gage is 7560 ft from topographic map.

REMARKS.--Record is complete and reliable except for the following days when the stage-discharge relationship was affected by ice: Dec 4-5, 22-26, and 31, 2006; Jan 1-3, 6-10, and 15-31; Feb 1-4; and Mar 1-5, 2007. Upstream transmountain diversions occur through Twin Lakes Tunnel and through Hunter Tunnel. Record is good except for periods of ice-affected record, which are fair. Station operated and maintained by George Wear and James Kellogg. Record developed by James Kellogg.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- ROABMCCO04 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DIBCIII	.II.OD, III O	ME	AN VALUE		TO BELLE				
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	203	190	152		110	92	130	482	821	566	245	168
2	195	178	143		110	95	134	565	858	534	241	156
3	223	186	129	115	110	97	135	552	978	500	261	152
4	229	184	141	118	110	99	137	553	946	480	245	163
5	240	182	146	118	101	99	150	448	1050	473	241	174
6	260	180	154	110	99	99	148	394	1120	451	263	235
7	326	181	136	118	99	95	153	364	869	425	256	219
8	284	177	131	122	98	95	156	341	752	414	265	206
9	260	175	132	125	97	93	153	354	761	379	234	201
10	259	173	130	125	97	95	156	367	892	352	220	195
11	248	158	129	120	98	95	145	420	1010	335	209	184
12	239	176	127	111	99	97	146	539	1210	333	199	176
13	238	155	126	113	97	104	145	663	1030	335	199	169
14	240	165	129	113	98	109	139	760	1050	309	200	167
15	243	153	127	90	96	114	145	804	1130	297	205	168
16	241	157	127	110	97	115	156	865	1180	285	250	173
17	252	162	126	110	95	118	164	863	1230	279	243	307
18	238	158	122	110	96	126	159	884	1160	282	219	295
19	216	155	122	110	97	133	163	996	1020	312	210	239
20	223	155	122	110	98	138	173	1030	999	299	199	216
21	221	154	120	110	96	142	199	993	958	365	187	194
22	212	154	112	110	96	136	196	989	882	387	180	183
23	203	152	122	110	96	134	201	790	827	335	174	205
24	213	150	122	110	96	140	213	691	830	335	178	241
25	213	150	122	110	93	133	200	605	782	321	171	217
26	210	148	125	110	99	132	194	590	719	349	162	204
27	195	142	126	110	97	142	199	631	695	340	162	189
28	203	147	122	110	100	153	232	789	658	365	172	185
29	201	145	119	110		142	309	896	614	309	171	185
30	200	123	116	110		135	414	764	585	275	170	184
31	196		106	110		133		733		257	163	
TOTAL	7124	4865	3963		2775	3630	5344	20715	27616	11278	6494	5950
MEAN	230	162	128		99.1	117	178	668	921	364	209	198
AC-FT	14130	9650	7860		5500	7200	10600	41090	54780	22370	12880	11800
MAX	326	190	154		110	153	414	1030	1230	566	265	307
MIN	195	123	106	90	93	92	130	341	585	257	162	152
CAL YR	2006	TOTAL	104585	MEAN	287 MAX	137	70 MIN	78	AC-FT	207400		

MAX DISCH: 1440 CFS AT 23:30 ON Jun. 17, 2007 GH 4.74 FT. SHIFT 0.1 FT. MAX GH: 4.74 FT. AT 23:30 ON Jun. 17, 2007

283 MAX

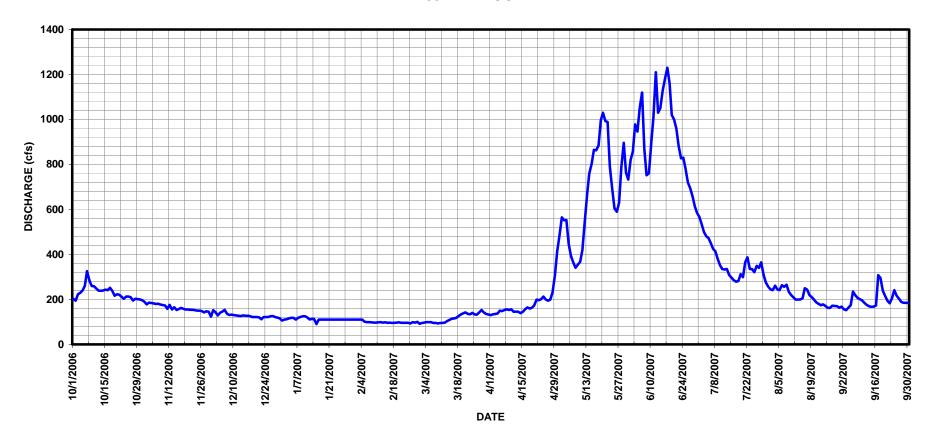
FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

TOTAL 103234 MEAN

1230 MTN

90 AC-FT

# ROARING FORK RIVER BELOW MAROON CREEK NEAR ASPEN CO WY2007 HYDROGRAPH



#### ROARING FORK RIVER ABOVE FRYINGPAN RIVER NEAR BASALT, CO

LOCATION.--Lat 39° 21'40", long 107° 01'44" in SW1/4 NE1/4 Sec. 18, T8S, R86W in Pitkin County. Located on left bank of Roaring Fork River, just below Highway 82 bridge, 0.5 mi. above confluence with Fryingpan River, and 2.5 mi. above confluence with Sopris Creek.

DRAINAGE AREA. --N/A.

GAGE.--Sutron Model 5600 AccuBubble sensor and Sutron SatLink 2 data collection platform (DCP) housed in 2'-0" rectangular steel shelter. AccuBubble sensor is referenced to outside staff gage. Primary record is DCP log data, with satellite data used as backup.

REMARKS.--The 15-minute DCP log data were used to develop the record, which is complete for the period of operation. The record is questionable due to uncertainty in staff gage readings after the gage potentially moved during the period of high flows in spring runoff. During this period the accububble gage could not be calibrated reliably. A hydrographic comparison was made with downstream gage Roaring Fork River near Emma (ROAEMMCO) and releases from Ruedi Reservoir into the Fryingpan River measured at Fryingpan River below Ruedi Reservoir (FRYRUDCO). This comparison revealed the inaccuracy of Rating 2 above about 400 cfs in flow. Average daily discharge was estimated Apr 1-4, 22-30; May 1-31; Jun 1-30; Jul 1-15, 22-30; Aug 25 and Sep 7-11, 18-19, 2007. Record is fair except for periods of estimated daily discharge, which are poor. The gage is operated on a seasonal basis (Apr 1 - Oct 31 only). The gage was started in operation in late October 2006. WY2007 is the first year to publish this record. Gaging station operated and maintained by James Kellogg. Discharge record was developed by James Kellogg.

> DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

RATING TABLE. -- ROAFRYCO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							215	643	1000	766	275	165
2							220	775	1050	726	260	161
3							230	779	1310	655	266	153
4							234	809	1270	612	266	156
5							263	675	1420	600	258	156
6							274	599	1640	584	323	190
7							276	528	1220	540	324	208
8							283	463	1030	524	321	193
9							285	460	980	493	275	187
10							288	447	1160	451	236	186
11							267	485	1370	425	222	178
12							254	640	1750	434	205	172
13							252	869	1490	437	204	165
14							235	1020	1450	380	201	156
15							235	1090	1590	361	215	157
16							245	1170	1720	336	246	156
17							272	1160	1810	312	262	276
18							263	1160	1830	323	238	441
19							261	1330	1540	364	222	325
20							269	1460	1470	390	212	280
21							305	1400	1430	417	196	244
22							327	1440	1320	509	181	219
23							312	1120	1210	461	173	217
24							331	927	1220	441	175	375
25							305	782	1120	430	174	326
26							287	718	1000	503	167	271
27							285	735	967	453	159	253
28							320	910	905	510	170	237
29							415	1130	845	423	168	230
30							553	976	785	345	171	231
31								905		307	160	
TOTAL							8561	27605	38902	14512	6925	6664
MEAN							285	890	1297	468	223	222
AC-FT							16980	54750	77160	28780	13740	13220

WTR YR 2007 TOTAL. 103169 MEAN 564 MAX 1830 MTN 153 AC-FT 204600 (PARTIAL YEAR RECORD)

\_\_\_

---

553

215

54750

1460

447

77160

1830

785

28780

766

307

16980

324

159

441

153

13740

MAX DAILY DISCH: 1830 CFS ON Jun. 18, 2007

---

MEAN AC-FT

MAX

MTN

---

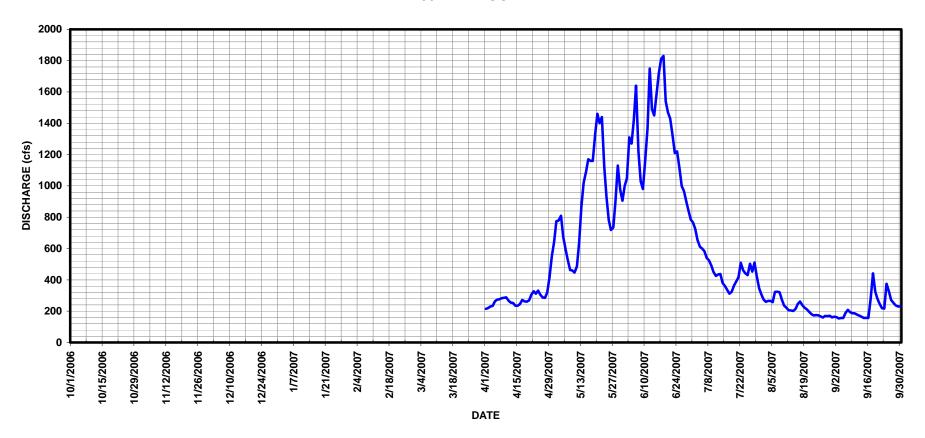
MAX DISCHARGE OCCURRED DURING A PERIOD OF ESTIMATED GAGE HEIGHT RECORD

---

\_\_\_

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# ROARING FORK RIVER ABOVE FRYINGPAN RIVER NEAR BASALT CO WY2007 HYDROGRAPH



# 09077200 FRYINGPAN RIVER NEAR IVANHOE LAKE, CO

LOCATION.--Lat 39°14'42", long 106°31'50", unsurveyed in Pitkin County, Hydrologic Unit 14010004. Located on left bank 100 ft downstream from diversion dam, 2 mi southwest of Ivanhoe Lake, and 9.1 mi southeast of Norrie, CO.

DRAINAGE AREA.-18.7 mi<sup>2</sup>.

GAGE.--Sutron stage discharge recorder (SDR) installed Sep 6, 2006 in 3'-0" square doghouse style metal-clad shelter on 24" diameter corrugated metal well located directly in stream. A Stevens A-35 chart recorder (previously used as primary data source for record) was removed from shelter on Oct 5, 2006. SDR is set by drop tape to an inside reference point on edge of equipment shelf. Primary record is SDR data. A USBR shaft encoder inside shelter (with shared float) is hard-wired to Chapman control house for satellite transmission. SDR serves as primary data to develop record. No USBR data were available in WY2007. Control is a 9.8-ft. wide sharp-crested concrete weir 20 ft. below gage. Elevation of gage is 9,945 ft from topographic map.

REMARKS.--Record is complete and reliable, except for the period of Nov 12, 2006 through Apr 22, 2007 when the well was frozen. Comparison with downstream gage at Thomasville (FRYTHOCO) was used to estimate record for this period. Record is good except for period of no gage height record, which is poor. Gaging station operated by George Wear, James Kellogg, and Craig Bruner. Discharge record computed by James Kellogg.

RATING TABLE. -- FRYIVLCOO8 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE,	ΙN	CFS, WATER Y		YEAR	OCTOBER	2006	ΤO	SEPTEMBER	2007	
			N	MEAN V	/ALUES					

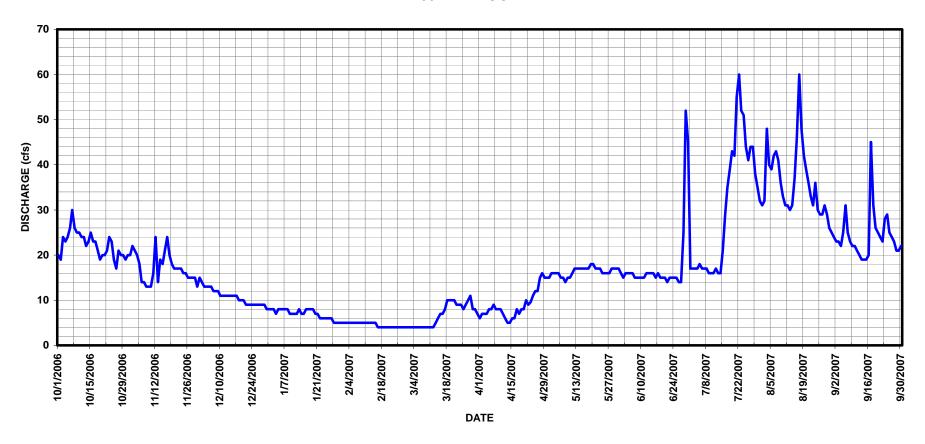
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	15	8.0	5.0	4.0	6.0	15	16	17	31	24
2	19	22	14	8.0	5.0	4.0	7.0	16	15	17	32	23
3	24	21	13	7.0	5.0	4.0	7.0	16	16	17	48	23
4	23	20	13	8.0	5.0	4.0	7.0	16	16	17	40	22
5	24	18	13	8.0	5.0	4.0	8.0	16	16	18	39	25
6	26	14	13	8.0	5.0	4.0	8.0	15	16	17	42	31
7	30	14	12	8.0	5.0	4.0	9.0	15	15	17	43	25
8	26	13	12	8.0	5.0	4.0	8.0	14	15	17	41	23
9	25	13	12	7.0	5.0	4.0	8.0	15	15	16	36	22
10	25	13	11	7.0	5.0	4.0	8.0	15	15	16	33	22
11	24	16	11	7.0	5.0	4.0	7.0	16	15	16	31	21
12	24	24	11	7.0	5.0	4.0	6.0	17	16	17	31	20
13	22	14	11	8.0	5.0	5.0	5.0	17	16	16	30	19
14	23	19	11	7.0	5.0	6.0	5.0	17	16	16	31	19
15	25	18	11	7.0	5.0	7.0	6.0	17	16	21	37	19
16	23	21	11	8.0	4.0	7.0	6.0	17	15	29	46	20
17	23	24	11	8.0	4.0	8.0	8.0	17	16	35	60	45
18	21	20	10	8.0	4.0	10	7.0 8.0	17 18	15 15	39	48	31
19 20	19 20	18 17	10 10	8.0 7.0	4.0	10 10	8.0	18	15	43 42	42 39	26 25
21	20	17	9.0	7.0	4.0 4.0	10	10	18 17	14	42 55	39	25
22	21	17	9.0	6.0	4.0	9.0	9.0	17	15	60	33	23
23	24	17	9.0	6.0	4.0	9.0	9.6	17	15	52	31	28
24	23	16	9.0	6.0	4.0	9.0	11	16	15	51	36	29
25	19	16	9.0	6.0	4.0	8.0	12	16	15	44	30	25
26	17	15	9.0	6.0	4.0	9.0	12	16	14	41	29	24
27	21	15	9.0	6.0	4.0	10	15	16	14	44	29	23
28	20	15	9.0	5.0	4.0	11	16	17	25	44	31	21
29	20	15	9.0	5.0		8.0	15	17	52	38	29	21
30	19	13	8.0	5.0		8.0	15	17	45	35	26	22
31	20		8.0	5.0		7.0		17		32	25	
TOTAL	690	515	332.0	215.0	127.0	209.0	266.6	507	534	939	1115	725
MEAN	22.3	17.2	10.7	6.94	4.54	6.74	8.89	16.4	17.8	30.3	36.0	24.2
AC-FT	1370	1020	659	426	252	415	529	1010	1060	1860	2210	1440
MAX	30	24	15	8.0	5.0	11	16	18	52	60	60	45
MIN	17	13	8.0	5.0	4.0	4.0	5.0	14	14	16	25	19

CAL YR 2006 TOTAL 6404.8 MEAN 17.5 MAX 70 MIN 5.9 AC-FT 12700 WTR YR 2007 TOTAL 6174.6 MEAN 16.9 MAX 60 MIN 4.0 AC-FT 12250

MAX DISCH: 100 CFS AT 22:00 ON Aug. 16, 2007 GH 2.2 FT. SHIFT 0 FT. MAX GH: 2.2 FT. AT 22:00 ON Aug. 16, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 09077200 FRYINGPAN RIVER NEAR IVANHOE LAKE CO WY2007 HYDROGRAPH



# 09077610 IVANHOE CREEK NEAR NAST, CO

LOCATION.--Lat 39°17'13", long 106°33'31", unsurveyed in Pitkin County, Hydrologic Unit 14010004. Located on left bank 60 ft upstream from culvert under Nast Tunnel, 300 ft downstream from diversion dam, 2.3 mi east of Nast, and 5.8 mi southeast of Norrie, CO.

DRAINAGE AREA. -9.43 mi<sup>2</sup>.

GAGE.--Sutron stage discharge recorder (SDR) housed in a 3'-0" square metal-clad shelter on 24" diameter corrugated metal well located directly in stream. SDR was installed in Sep 2006 and Stevens A-35 graphic water-stage recorder was removed. SDR is set by drop tape to an inside reference point on edge of equipment shelf. Primary record is SDR data. A USBR shaft encoder (with separate float) in the shelter is hard-wired to Chapman Control House for satellite transmission. No USBR data were available in WY 2007. Control is a 120° v-notch weir (low flows) 55 ft below the gage and 8 ft culvert (high flows) 60 feet below the gage. Elevation of gage is 9,980 ft from topographic map.

REMARKS.--Record is complete and reliable for the year, except for the following days: Oct 27 to Nov 3, 2006, when gage height was affected by backwater from ice, and Nov 4, 2006 to Apr 1, 2007, when the well was frozen. Record is good, except for periods of ice effect and no gage height record, which are poor. Station operated by George Wear and James Kellogg. Record developed by Ed Wilson and James Kellogg.

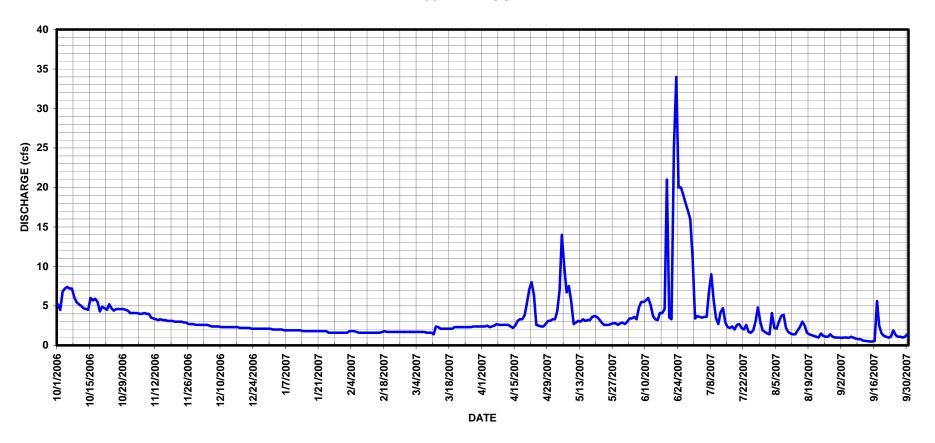
RATING TABLE. -- IVCRNACO04 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHA	RGE, IN CF		EAR OCTOE AN VALUES		ro septem	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	4.1	2.6	2.0	1.6	1.7	2.4	3.3	2.7	3.4	1.5	.97
2	4.5	4.1		2.0	1.6	1.7	2.4	3.3	3.0	3.7	1.4	.95
3	6.8	4.1		2.0	1.8	1.7	2.5	4.3	3.4	3.6	4.1	1.0
4	7.2	4.1		2.0	1.8	1.7	2.3	7.0	3.4	3.5	2.2	1.0
5	7.4	4.0		2.0	1.8	1.7	2.4	14	3.6	3.6	2.1	. 93
6	7.2	4.0		1.9	1.7	1.7	2.5	10	3.3	3.6	3.0	1.1
7	7.2	4.1		1.9	1.6	1.7	2.7	6.7	4.8	6.7	3.7	.96
8	6.1	4.0		1.9	1.6	1.6	2.6	7.5	5.5	9.0	3.9	.85
9	5.5	4.0		1.9	1.6	1.6	2.6	5.5	5.5	5.7	2.2	.80
10	5.2	3.5		1.9	1.6	1.6	2.6	2.7	5.7	3.5	1.7	.77
11	5.0	3.4	2.3	1.9	1.6	1.4	2.6	2.9	6.0	2.7	1.5	.61
12	4.7	3.3		1.9	1.6	2.4	2.6	3.1	5.1	4.2	1.4	.56
13	4.6	3.2		1.9	1.6	2.3	2.4	3.0	3.7	4.7	1.4	.52
14	4.5	3.3		1.8	1.6	2.1	2.2	3.3	3.3	2.9	1.9	.48
15	6.0	3.2		1.8	1.6	2.1	2.5	3.1	3.2	2.3	2.3	.49
16	5.7	3.2		1.8	1.6	2.1	3.1	3.2	4.1	2.2	3.0	.56
17	5.9	3.1		1.8	1.7	2.1	3.3	3.2	4.1	2.4	2.5	5.6
18 19	5.5	3.1		1.8	1.8	2.1	3.3	3.6	4.6 21	2.0	1.6	2.5 1.5
	4.3	3.1		1.8	1.7 1.7	2.1	3.8 5.3	3.7 3.6	3.5	2.6 2.7	1.4	
20		3.0				2.3					1.3	1.2
21 22	4.7	3.0 3.0		1.8	1.7 1.7	2.3	7.1 8.0	3.3 2.9	3.3 25	2.2	1.2 1.1	1.1 .98
23	4.5 5.2			1.8	1.7	2.3	6.4	2.9	25 34	2.0	1.1	1.1
23	4.7	3.0 2.9		1.8	1.7	2.3	2.6	2.6	20	1.7	1.0	1.1
25	4.7	2.9		1.6	1.7	2.3	2.5	2.6	20	1.6	1.2	1.3
26	4.4	2.9		1.6	1.7	2.3	2.3	2.7	19	1.0	1.1	1.1
27	4.6	2.7		1.6	1.7	2.3	2.4	2.7	19	3.1	1.1	1.1
28	4.6	2.7		1.6	1.7	2.4	2.7	2.8	17	4.8	1.4	1.0
29	4.6	2.6		1.6		2.4	3.1	2.6	16	3.0	1.1	1.1
30	4.5	2.6		1.6		2.4	3.1	2.8	11	1.9	1.0	1.4
31	4.4	2.0	2.1	1.6		2.4		2.9		1.7	.99	
TOTAL	164.2	100.0		56.2	46.8	63.4	96.4	127.6	282.8	101.5	56.79	35.43
MEAN	5.30	3.33		1.81	1.67	2.05	3.21	4.12	9.43	3.27	1.83	1.18
AC-FT	326	198	140	111	93	126	191	253	561	201	113	70
MAX	7.4	4.1		2.0	1.8	2.4	8.0	14	34	9.0	4.1	5.6
MIN	4.3	2.6	2.1	1.6	1.6	1.4	2.2	2.6	2.7	1.6	.99	.48
CAL YR	2006	TOTAL	1254.99 N	MEAN 3	3.44 MAX	46	6 MIN	.34	AC-FT	2490		
	2007	TOTAL	1201.92 N		3.29 MAX	34			AC-FT	2380		
				'		0.						

MAX DISCH: 64.6 CFS AT 12:15 ON Jun. 19, 2007 GH 2.35 FT. SHIFT 0.06 FT. MAX GH: 2.35 FT. AT 12:15 ON Jun. 19, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 09077610 IVANHOE CREEK NEAR NAST CO WY2007 HYDROGRAPH



## 09077800 SOUTH FORK FRYINGPAN RIVER AT UPPER STATION NEAR NORRIE, CO

LOCATION.--Lat 39°14'20", long 106°35'24", unsurveyed in Pitkin County, Hydrologic Unit 14010004. Located on right bank 300 ft downstream from diversion dam, 5.2 mi upstream from mouth, and 7.2 mi southeast of Norrie, CO.

DRAINAGE AREA.-11.5 mi<sup>2</sup>.

GAGE.--Sutron stage discharge recorder (SDR) on rectangular platform with removable steel cover on 12" diameter corrugated metal well located directly in stream. SDR was installed on Oct 4, 2006. Stevens A-35 graphic water-stage recorder previously located in upstream rectangular steel box on 4" diameter stand point was removed Oct 4, 2006. SDR is set by drop tape to a reference point (1/4 in brass bolt) on downstream side of graphic recorder shelter. Primary record is SDR data. A USBR shaft encoder in the shelter (connected to SDR wheel by a chain) is hard-wired to Chapman Control House for satellite transmission. No USBR data were available in WY 2007. Control is a 6.2-ft. wide concrete weir. Elevation of gage is 9,990 ft from topographic map.

REMARKS.--Record is complete and reliable, except for Oct. 1 to Oct 4, 2006, when the chart recorder was not working and SDR was not installed; Oct 28, 2006 - April 10, 2007, when the well was frozen; and Jun 19 -July 9, July 15-20, and Aug 18 - Sep 11, 2007, when the float or counter weight caused the SDR record to flatline at about 2.75 ft, occurred when gage height was receding after periods of high discharge. Record is fair, except for periods of no gage height record, which are poor. Station operated by George Wear and James Kellogg. Record developed by Ed Wilson and James Kellogg.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

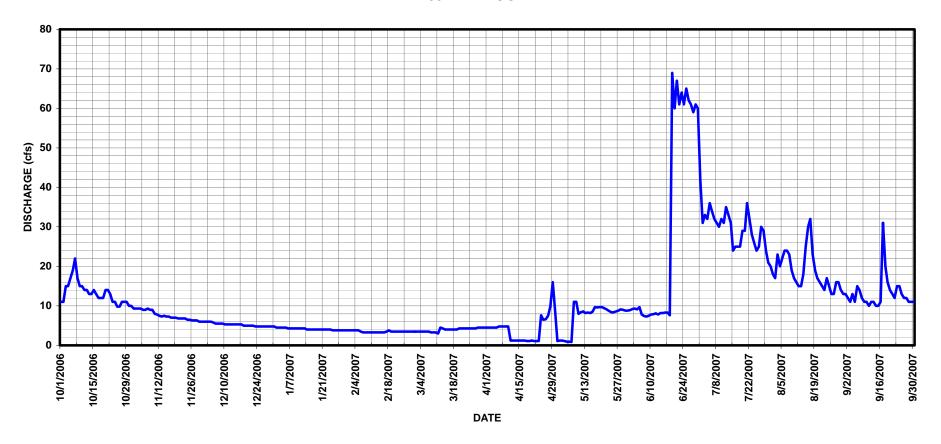
RATING TABLE. -- FRYSFUCO09 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.3	6.0	4.5	3.8	3.5	4.5	1.1	8.9	42	18	13
2	11	9.3	6.0	4.5	3.8	3.5	4.5	1.2	9.2	31	17	12
3	15	9.3	6.0	4.5	3.8	3.5	4.5	1.2	9.3	33	23	11
4	15	9.3	6.0	4.5	3.8	3.5	4.5	1.1	9.1	32	20	13
5	17	9.0	5.8	4.5	3.8	3.5	4.5	.94	9.7	36	22	11
6	19	9.0	5.5	4.3	3.5	3.5	4.8	.93	7.8	34	24	15
7	22	9.3	5.5	4.3	3.3	3.5	4.8	.87	7.4	32	24	14
8	17	9.0	5.5	4.3	3.3	3.3	4.8	11	7.3	31	23	12
9	15	9.0	5.5	4.3	3.3	3.3	4.8	11	7.5	30	19	11
10	15	8.0	5.3	4.3	3.3	3.3	4.8	8.0	7.8	32	17	11
11	14	7.8	5.3	4.3	3.3	3.0	1.2	8.4	7.9	31	16	10
12	14	7.5	5.3	4.3	3.3	4.5	1.2	8.6	8.1	35	15	11
13	13	7.3	5.3	4.3	3.3	4.3	1.2	8.2	7.8	33	15	11
14	13	7.5	5.3	4.0	3.3	4.0	1.2	8.3	8.2	31	18	10
15	14	7.3	5.3	4.0	3.3	4.0	1.2	8.2	8.2	24	25	10
16	13	7.3	5.3	4.0	3.3	4.0	1.2	8.5	8.3	25	30	11
17	12	7.0	5.3	4.0	3.5	4.0	1.2	9.7	8.3	25	32	31
18	12	7.0	5.0	4.0	3.8	4.0	1.1	9.6	7.6	25	23	20
19	12	7.0	5.0	4.0	3.5	4.0	1.1	9.7	69	29	19	16
20	14	6.8	5.0	4.0	3.5	4.3	1.2	9.7	60	29	17	14
21	14	6.8	5.0	4.0	3.5	4.3	1.1	9.4	67	36	16	13
22	13	6.8	5.0	4.0	3.5	4.3	1.1	9.1	61	32	15	12
23	11	6.8	4.8	4.0	3.5	4.3	1.1	8.7	64	28	14	15
24	11	6.5	4.8	4.0	3.5	4.3	7.6	8.4	61	26	17	15
25	9.8	6.5	4.8	3.8	3.5	4.3	6.5	8.4	65	24	15	13
26	9.8	6.3	4.8	3.8	3.5	4.3	6.6	8.6	62	25	13	12
27	11	6.3	4.8	3.8	3.5	4.3	7.5	8.8	61	30	13	12
28	11	6.3	4.8	3.8	3.5	4.5	9.9	9.1	59	29	16	11
29	11	6.0	4.8	3.8		4.5	16	9.0	61	24	16	11
30	10	6.0	4.8	3.8		4.5	8.6	8.8	60	21	14	11
31	10		4.8	3.8		4.5		8.8		20	13	
TOTAL	409.6	227.3	162.4	127.5	97.8	122.6	124.3	223.3	898.4	915	579	392
MEAN	13.2	7.58	5.24	4.11	3.49	3.95	4.14	7.20	29.9	29.5	18.7	13.1
AC-FT	812	451	322	253	194	243	247	443	1780	1810	1150	778
MAX	22	9.3	6.0	4.5	3.8	4.5	16	11	69	42	32	31
MIN	9.8	6.0	4.8	3.8	3.3	3.0	1.1	.87	7.3	20	13	10
CAL YR	2006	TOTAL	4170.7	MEAN	11.4 MAX	12	0 MIN	2.5	AC-FT	8270		
WTR YR	2007	TOTAL	4279.2	MEAN	11.7 MAX	6	9 MIN	.87	AC-FT	8490		

MAX DAILY DISCH: 69.0 CFS ON JUN 19, 2007 PEAK DISCHARGE OCCURRED DURING PERIOD OF NO GAGE HT RECORD

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 09077800 SOUTH FORK FRYINGPAN RIVER AT UPPER STATION NEAR NORRIE CO WY2007 HYDROGRAPH



## 09077945 CHAPMAN GULCH NEAR NAST, CO

LOCATION.--Lat 39°15'51", long 106°37'54", in NW1/4 SE1/4 Sec. 14, T8S, R83W in Pitkin County, Hydrologic Unit 14010004. Located on right bank 700 ft downstream from Chapman diversion tunnel, 3.3 mi upstream from mouth, and 4.3 mi south of Norrie, CO.

DRAINAGE AREA.-5.99 mi<sup>2</sup>.

GAGE.--Station is equipped with a Stevens A-35 graphic water-stage recorder and a Sutron stage discharge recorder (SDR) in 3'-0" square metal-clad shelter on a 24" diameter corrugated metal well located directly in stream. Recorder and SDR are equipped with separate floats and are set using a drop tape from an inside reference point. Primary record is SDR data and chart is used as backup. The SDR was malfunctioning during part of the year and was replaced on Jun. 12. The USBR has a shaft encoder in the shelter (connected with belt to the Stevens A-35 recorder wheel) that is hard-wired to Chapman Control House. No USBR data were available for development of the WY 2007 record. Control is a 120° v-notch sharp-crested weir (low flows) and channel (high flows). Elevation of gage is 9,982.76 ft.

REMARKS.--SDR data were used to develop a record that is complete and reliable from Oct 1, 2006 to March 15, 2007. Record was estimated from Mar. 16 to Apr. 9. 2007, when the chart recorder was out of paper and SDR was malfunctioning. Chart data were used from Apr. 10 to Jun. 12, 2007, to develop a record that is reliable except for May 10, 15, 18 and 20-22 when low ink resulted in skipping. New SDR was installed and used to develop a record that is complete and reliable from June 13 to Sep. 30, 2007. Record is good, except for periods of no gage height record, which are poor. Gaging station operated by George Wear and James Kellogg. Record developed by James Kellogg.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE.--CHAGULCO06 USED FROM 01-OCT-2006 TO 30-SEP-2007

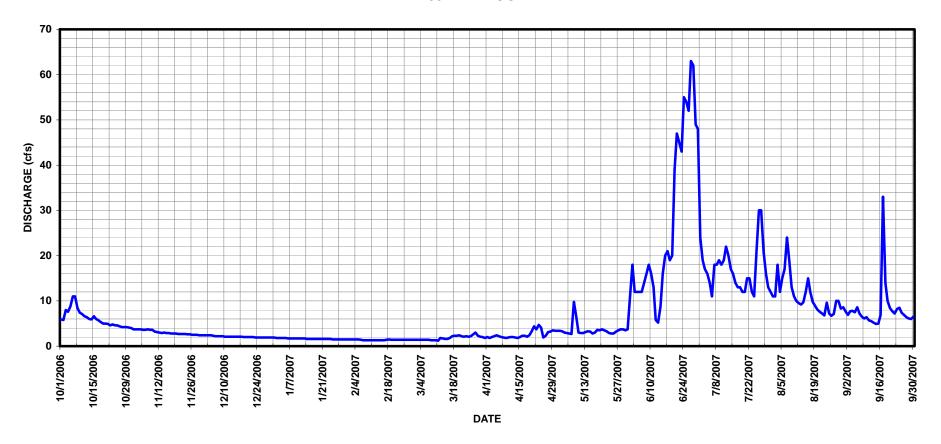
	MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	5.9	3.7	2.4	1.8	1.5	1.4	2.0	3.4	11	24	11	7.7	
2	5.8	3.7	2.4	1.8	1.5	1.4	1.8	3.4	18	19	11	6.9	
3	8.0	3.7	2.4	1.8	1.5	1.4	2.0	3.3	12	17	18	7.7	
4	7.6	3.7	2.4	1.8	1.5	1.4	2.2	3.0	12	16	12	7.8	
5	8.8	3.6	2.3	1.8	1.5	1.4	2.4	2.9	12	14	15	7.5	
6	11	3.6	2.2	1.7	1.4	1.4	2.2	2.8	12	11	17	8.6	
7	11	3.7	2.2	1.7	1.3	1.4	2.0	2.7	14	18	24	7.2	
8	8.4	3.6	2.2	1.7	1.3	1.3	1.9	9.8	16	18	19	6.5	
9	7.4	3.6	2.2	1.7	1.3	1.3	1.8	6.5	18	19	13	6.1	
10	7.1	3.2	2.1	1.7	1.3	1.3	1.9	3.0	16	18	11	6.4	
11	6.6	3.1	2.1	1.7	1.3	1.2	2.0	2.9	13	19	10	5.7	
12	6.4	3.0	2.1	1.7	1.3	1.8	2.0	2.9	5.8	22	9.5	5.5	
13	6.0	2.9	2.1	1.7	1.3	1.7	1.9	3.1	5.2	20	9.2	5.2	
14	5.9	3.0	2.1	1.6	1.3	1.6	1.8	3.3	8.8	17	9.7	4.9	
15	6.6	2.9	2.1	1.6	1.3	1.6	2.0	3.2	16	16	12	5.0	
16	6.0	2.9	2.1	1.6	1.3	1.8	2.3	2.8	20	14	15	6.9	
17	5.7	2.8	2.1	1.6	1.4	2.2	2.3	3.0	21	13	12	33	
18	5.3	2.8	2.0	1.6	1.5	2.3	2.1	3.6	19	13	9.8	14	
19	5.0	2.8	2.0	1.6	1.4	2.3	2.4	3.5	20	12	8.9	10	
20	5.0	2.7	2.0	1.6	1.4	2.4	3.3	3.7	39	12	8.1	8.4	
21	4.9	2.7	2.0	1.6	1.4	2.2	4.4	3.5	47	15	7.6	7.7	
22	4.6	2.7	2.0	1.6	1.4	2.1	3.7	3.3	45	15	7.2	7.2	
23	4.8	2.7	1.9	1.6	1.4	2.2	4.7	2.9	43	12	6.8	8.2	
24	4.6	2.6	1.9	1.6	1.4	2.1	4.1	2.8	55	11	9.6	8.5	
25	4.6	2.6	1.9	1.5	1.4	2.2	1.9	2.8	54	21	7.2	7.4	
26	4.4	2.5	1.9	1.5	1.4	2.6	2.3	3.2	52	30	6.7	6.9	
27	4.2	2.5	1.9	1.5	1.4	3.0	3.1	3.5	63	30	7.1	6.4	
28	4.2	2.5	1.9	1.5	1.4	2.3	3.2	3.7	62	21	10	6.1	
29	4.2	2.4	1.9	1.5		2.1	3.5	3.7	49	16	10	6.0	
30	4.1	2.4	1.9	1.5		2.0	3.4	3.5	48	13	8.3	6.5	
31	4.0		1.9	1.5		1.8		3.7		12	8.6		
TOTAL	188.1	90.6	64.6	50.7	38.8	57.2	76.6	109.4	826.8	528	344.3	241.9	
MEAN	6.07	3.02	2.08	1.64	1.39	1.85	2.55	3.53	27.6	17.0	11.1	8.06	
AC-FT	373	180	128	101	77	113	152	217	1640	1050	683	480	
MAX	11	3.7	2.4	1.8	1.5	3.0	4.7	9.8	63	30	24	33	
MIN	4.0	2.4	1.9	1.5	1.3	1.2	1.8	2.7	5.2	11	6.7	4.9	

CAL YR 2006 TOTAL 2742 MEAN 7.51 MAX 87 MIN 1.6 AC-FT 5440 WTR YR 2007 TOTAL 2617 MEAN 7.17 MAX 63 MIN 1.2 AC-FT 5190

MAX DISCH: 74.2 CFS AT 22:45 ON Jun. 27, 2007 GH 3.41 FT. SHIFT 0.07 FT. MAX GH: 3.41 FT. AT 22:45 ON Jun. 27, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 09077945 CHAPMAN GULCH NEAR NAST CO WY2007 HYDROGRAPH



# 09078500 NORTH FORK FRYINGPAN RIVER NEAR NORRIE, CO

LOCATION.--Lat 39°20'34", long 106°39'55", in SE4 NW4 Sec. 21, T8S, R83W in Pitkin County, Hydrologic Unit 14010004. Located on left bank, 800 ft upstream from bridge on county road, 0.4 mi upstream from mouth, 0.5 mi downstream from Last Chance Creek, and 1.3 mi northwest of Norrie, CO.

DRAINAGE AREA. -- 42 mi<sup>2</sup>.

GAGE.--Steven's A-35 graphic water-stage recorder in a 42" diameter corrugated metal well. A Synergetics DCP w/satellite monitoring and a shaft encoder operated and maintained by the National Weather Service is also located in the gage. Recorder and shaft encoder are referenced to inside drop tape. Chart recorder malfunctions resulted in replacement with a Sutron stage discharge recorder (SDR) on Aug 22, 2007. Primary record is satellite record, with chart used as backup until Aug 22, 2007, after which the SDR log is the primary record. Control is natural channel at low flows and boulders at high flows. Elevation of gage is 8,330 ft from topographic map.

REMARKS.--Satellite record is complete and reliable from Oct 1-29, 2006. Satellite telemetry was down Oct.30, 2006 to June 21, 2007. Satellite transmissions from June 22 to Sept 30, 2007 were sporadic. Gage heights from the graphic chart recorder were used April 19 to June 1, and also June 8 and July 26. Satellite data were used July 6-9, 12-14, 17-22, 30, and Aug 1. SDR data were used Aug 22 to Sept. 30. Record is good except for period of no gage height record: Oct. 30 to April 18, June 2-7, 9-30, July 1-5, 10-11, 15-16, 23-25, 27-31 and Aug 2-22, which are poor. Station operated by James Kellogg and George Wear and record developed by James Kellogg and Ed Wilson.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

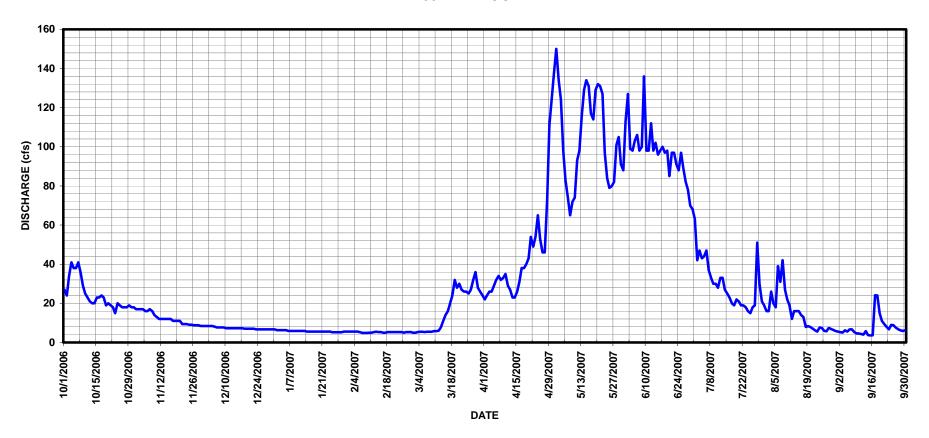
RATING TABLE. -- FRYNFNCO10 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	27	17	8.4	6.3	5.6	5.0	22	138	113	63	16	5.6	
2	24	17	8.4	6.3	5.6	5.0	24	150	127	42	16	5.2	
3	34	17		6.3	5.6	5.3	26	134	99	47	26	5.1	
4	41	17	8.4	6.3	5.6	5.5	26	124	98	43	20	6.2	
5	38	16	8.1	6.3	5.6	5.5	29	98	103	44	18	5.6	
6	38	16	7.7	5.9	5.2	5.3	32	83	106	47	39	6.7	
7	41	17	7.7	5.9	4.9	5.5	34	74	98	37	31	6.7	
8	36	16	7.7	5.9	4.9	5.5	32	65	100	33	42	5.3	
9	29	14	7.7	5.9	4.9	5.5	33	72	136	30	27	4.7	
10	25	13	7.3	5.9	5.0	5.8	35	74	98	30	22	4.6	
11	23	12	7.3	5.9	5.0	5.8	29	93	98	28	19	4.3	
12	21	12	7.3	5.9	5.3	6.0	27	98	112	33	12	4.0	
13	20	12	7.3	5.9	5.5	7.7	23	116	98	33	16	5.8	
14	20	12	7.3	5.6	5.3	11	23	129	102	27	16	3.8	
15	23	12		5.6	5.3	14	26	134	96	25	16	3.6	
16	23	12	7.3	5.6	5.0	16	31	131	98	23	14	3.7	
17	24	11			5.0	20	38	117	100	20	13	24	
18	23	11			5.3	24	38	114	97	19	7.9	24	
19	19	11			5.3	32	40	129	98	22	8.3	15	
20	20	11			5.3	28	43	132	85	21	7.9	11	
21	19	9.4		5.6	5.3	30	54	131	97	19	7.1	9.4	
22	18	9.4			5.3	27	49	127	97	19	6.2	8.0	
23	15	9.4			5.3	26	54	97	91	18	5.6	6.7	
24	20	9.1			5.3	26	65	84	88	16	7.7	9.0	
25	19	9.1			5.0	25	53	79	97	15	7.4	8.8	
26	18	8.8			5.3	27	46	80	89	18	6.0	7.6	
27	18	8.8			5.3	32	46	82	82	19	5.7	6.8	
28	18	8.8			5.3	36	73	101	78	51	7.4	6.2	
29	19	8.4				28	111	105	70	30	6.9	5.9	
30	18	8.4				26	125	91	68	21	6.4	6.2	
31	18		6.7	5.6		24		88		19	5.8		
TOTAL	749	365.6	226.2	177.5	147.3	525.4	1287	3270	2919	912	459.3	229.5	
MEAN	24.2	12.2	7.30	5.73	5.26	16.9	42.9	105	97.3	29.4	14.8	7.65	
AC-FT	1490	725	449	352	292	1040	2550	6490	5790	1810	911	455	
MAX	41	17	8.4	6.3	5.6	36	125	150	136	63	42	24	
MIN	15	8.4	6.7	5.2	4.9	5.0	22	65	68	15	5.6	3.6	
CAL YR	2006	TOTAL	13214.5	MEAN	36.2 MAX	286	5 MIN	2.7	AC-FT	26210			
WTR YR	2007	TOTAL	11267.8	MEAN	30.9 MAX	150	) MIN	3.6	AC-FT	22350			

MAX DISCH: 178 CFS AT 02:00 ON May 15, 2007 GH 4.07 FT. SHIFT -0.04 FT. MAX GH: 4.07 FT. AT 02:00 ON May 15, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 09078500 NORTH FORK FRYINGPAN RIVER NEAR NORRIE CO WY2007 HYDROGRAPH



# 09078600 FRYINGPAN RIVER NEAR THOMASVILLE, CO

LOCATION.--Lat 39°20'41", long 106°40'23", in NW4 NW4 Sec. 21, T8S, R83W in Pitkin County, Hydrologic Unit 14010004. Located on right bank 400 ft upstream from private bridge, 400 ft downstream from mouth of North Fork Fryingpan River, 1.6 mi southeast of Thomasville, CO, and 1.7 mi northwest of Norrie, CO.

DRAINAGE AREA. -- 134 mi<sup>2</sup>.

GAGE.--Graphic water-stage recorder and shaft encoder in a standard 42" diameter corrugated metal well with Sutron SatLink high data rate DCP satellite equipment. Recorder and shaft encoder are set by drop tape from a reference point on the instrument shelf. Primary record is satellite data and chart record is used for backup. Control is a 100-ft. wide concrete dam 10 ft. below gage. Elevation of gage is 8,210 ft from topographic map.

REMARKS.--The record is complete and reliable for the year, except for brief periods on the following days: Feb 17, Feb 24, and Apr 1. Gage heights for these periods were obtained from backup chart recorder with no loss in accuracy. Record is good. Transmountain diversions above station occurred through Boustead Tunnel and Busk-Ivanhoe Tunnel. Station operated and record developed by James Kellogg.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- FRYTHOCO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

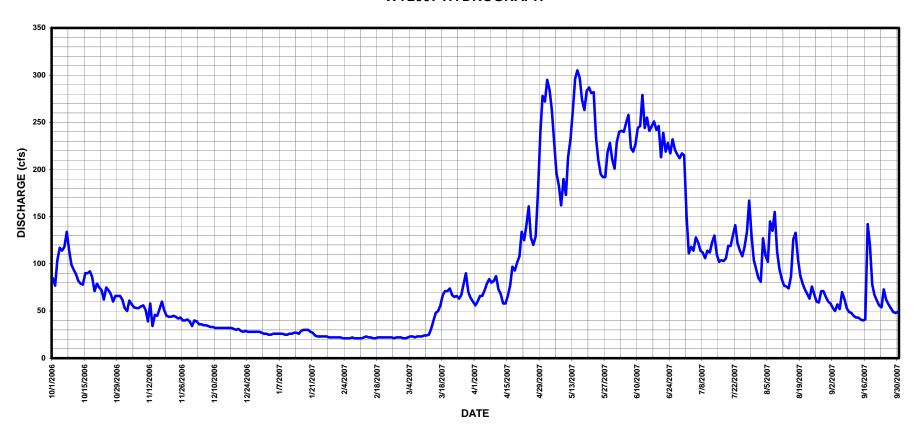
			DI	OCHAROD,	, 111 015,		EAN VALUI		00 1	O DILIBRIDI	310 2007			
DAY	OCT	NO	V	DEC	JAN	FEB	MAR	AP	R	MAY	JUN	JUL	AUG	SEP
1	85			40	26	22	21		6	272	229	151	85	58
2	77			39	25	22	21		0	295	240	111	81	53
3	104			36	25	21	22		6	284	241	118	127	50
4	117			36	26	21	23		6	263	240	114	109	57
5	114			35	26	21	23		2	228	250	128	102	52
6	118			35	26	21	22		9	196	258	123	145	70
7	134	5	3	34	26	22	23	8	4	183	223	114	135	63
8	115			33	26	21	23		0	162	219	112	155	53
9	99	5	6	33	25	21	23	8	2	190	227	106	113	49
10	94	5	1	32	25	21	24	8	7	173	244	114	95	48
11	89	3	9	32	26	21	24	7	3	213	246	112	84	45
12	82	5	8	32	26	22	25	6	8	232	279	123	77	43
13	79	3	4	32	27	23	31	5	8	261	244	130	76	43
14	78	4	6	32	27	22	40	5	8	296	255	110	74	41
15	90	4	5	32	26	22	48	6	6	305	241	102	87	40
16	90	5	2	32	29	21	50	7	7	297	246	104	126	41
17	92	6	0	32	30	21	56	9	7	274	251	103	133	142
18	86	5	1	31	30	22	67	9	3	263	242	106	105	120
19	71	4	5	30	30	22	71	10		283	246	119	88	78
20	79	4	4	31	28	22	71	10	8	287	213	119	79	67
21	75			29	27	22	74	13		281	239	130	73	61
22	72	4	5	28	24	22	67	12	5	282	219	141	68	56
23	62	4	4	29	23	22	65	14	0	233	228	122	63	54
24	75	4	2	28	23	22	66	16	1	210	217	114	76	73
25	72	4	3	28	23	21	63	12	8	195	232	108	68	62
26	68	4	0	28	23	22	67	12	0	192	221	118	60	57
27	60	4	0	28	23	22	79	12		192	216	134	59	53
28	66	4	1	28	22	22	90	17		218	212	167	71	49
29	66	3	9	28	22		70	23		228	217	129	71	48
30	66	3	4	27	22		64	27	8	211	215	104	65	49
31	62		_	26	22		60		-	201		94	60	
TOTAL	2637	142	9	976	789	606	1473	315	9	7400	7050	3680	2810	1775
MEAN	85.1	47.	6 3	1.5	25.5	21.6	47.5	10	5	239	235	119	90.6	59.2
AC-FT	5230	283	0 1	940	1560	1200	2920	627	0	14680	13980	7300	5570	3520
MAX	134	6		40	30	23	90	27	8	305	279	167	155	142
MIN	60	3	4	26	22	21	21	5	6	162	212	94	59	40
CAT VD	2006	попат	20075	METAT	100 5	M 73 37	606	MIN	2.4	7 C DD	79290			
CAL YR WTR YR		TOTAL TOTAL	39975 33784	MEAN MEAN	109.5 92.6	MAX MAX	305	MIN MIN	24 21	AC-FT AC-FT	67010			
*****	,	-011111	55,51	1177111	22.0	1 11 11 7	505	11111		110 11	0,010			

WTR YR 2007 TOTAL 33784 MEAN 92.6 MAX 305 MIN 21 AC-FT 67010 MAX DISCH: 358 CFS AT 23:30 ON May 14, 2007 GH 3.03 FT. SHIFT 0.03 FT.

MAX GH: 3.03 FT. AT 23:30 ON May 14, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# 09078600 FRYINGPAN RIVER NEAR THOMASVILLE CO WY2007 HYDROGRAPH



## 09080100 FRYINGPAN RIVER AT MEREDITH, CO

LOCATION.--Lat 39°21'45", long 106°43'55", in SE¼ SE¼ Sec. 11, T8S, R84W in Eagle County, Hydrologic Unit 14010004. Located on left bank at Meredith, CO, 0.1 mi downstream from Waterbury Creek, 0.7 mi downstream from Jakeman Gulch.

DRAINAGE AREA. -- 191 mi<sup>2</sup>.

WTR YR 2007

TOTAL

GAGE.--Graphic water-stage recorder and shaft encoder in a standard 42" diameter corrugated metal shelter and well. Station is outfitted with Synergetics shaft encoder and DCP satellite equipment operated and maintained by the National Weather Service. Recorder and shaft encoder are set by inside drop tape from an adjustable reference point on the instrument shelf. Primary record is satellite data and chart record is used for backup. Control is natural channel (rock and cobble) at low flows. Channel banks become part of the control at higher flows. Elevation of gage is 7,780 ft from topographic map.

REMARKS.--Record is complete and reliable except for the following periods: November 30, 2006 through March 19, 2007, when gage well was frozen. Numerous DCP transmission errors and resulting incomplete stage data were filled in using chart record without loss of accuracy. Chart record was used for periods May 25 -June 1, 2007, and Aug 8 - Sep 6, 2007. Record is good, except for the period when ther well was frozen (11/30/2006 to 3/19/2007), which is considered poor. Transmountain diversions above station occurred through Boustead Tunnel and Busk - Ivanhoe Tunnel. Station maintained by George Wear and James Kellogg. Record developed by Craig Bruner.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE.--FRYMERCO04 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	108	77	57	36	30	28	77	385	336	205	109	75	
2	101	71	56	35	30	28	80	422	339	159	101	70	
3	125	81	51	35	28	29	86	417	344	159	139	69	
4	148	78	51	36	28	30	86	390	368	151	127	75	
5	140	75	50	36	28	30	91	330	383	162	118	70	
6	143	74	50	36	28	29	99	276	418	161	160	87	
7	170	74	49	36	29	30	107	242	355	152	151	81	
8	152	75	47	36	28	30	100	206	321	148	183	70	
9	131	76	47	35	28	30	98	237	314	138	142	67	
10	124	73	46	35	28	31	106	224	337	142	123	65	
11	119	56	46	36	28	31	98	270	355	139	110	62	
12	109	80	46	36	29	32	102	325	402	148	97	59	
13	103	59	46	37	31	40	81	384	374	158	95	58	
14	101	86	45	37	29	52	76	440	383	139	94	55	
15	114	102	45	36	29	62	83	465	364	128	101	53	
16	113	143	45	40	28	65	93	460	377	125	137	53	
17	119	102	45	41	28	73	120	432	377	127	150	146	
18	114	71	44	41	29	87	117	392	376	128	125	140	
19	95	66	42	41	29	92	123	425	363	139	110	98	
20	106	68	44	38	29	85	131	441	316	142	99	85	
21	99	67	41	37	29	89	165	439	339	151	92	78	
22	94	65	39	33	29	85	158	452	312	163	87	73	
23	84	63	41	32	29	84	173	373	312	146	83	70	
24	97	63	39	32	29	83	205	319	287	135	94	84	
25	96	60	39	31	28	82	163	279	307	127	87	77	
26	92	59	39	31	29	84	152	272	289	135	80	71	
27	84	63	39	31	29	92	159	265	279	150	78	67	
28	90	71	39	30	29	109	211	295	269	186	90	64	
29	89	94	39	30		94	298	323	267	158	89	63	
30	89	49	38	30		92	371	323	265	132	83	64	
31	84		36	30		88		310		119	78		
TOTAL	3433	2241	1381	1086	805	1896	4009	10813	10128	4552	3412	2249	
MEAN	111	74.7	44.5	35.0	28.7	61.2	134	349	338	147	110	75.0	
AC-FT	6810	4450	2740	2150	1600	3760	7950	21450	20090	9030	6770	4460	
MAX	170	143	57	41	31	109	371	465	418	205	183	146	
MIN	84	49	36	30	28	28	76	206	265	119	78	53	
CAL YR	2006	TOTAL	55052	MEAN	151 MAX	862	2 MIN	35	AC-FT	109200			

MAX DISCH: 534 CFS AT 02:00 ON May. 15, 2007 GH 3.41 FT. SHIFT -0.02 FT. MAX GH: 3.41 FT. AT 02:00 ON May. 15, 2007

126 MAX

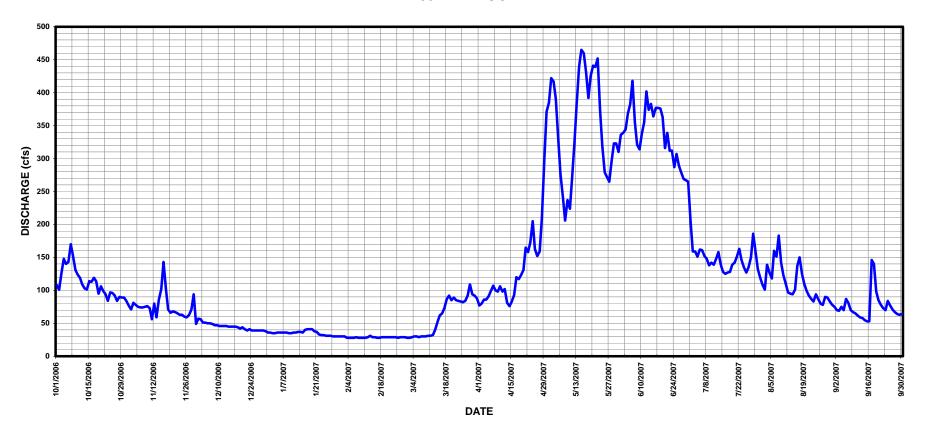
FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

46005 MEAN

465 MIN

28 AC-FT

# 09080100 FRYINGPAN RIVER AT MEREDITH CO WY2007 HYDROGRAPH



# 09080300 ROCKY FORK CREEK NEAR MEREDITH, CO

LOCATION.--Lat 39°21'42", long 106°49'12", in NW4 NW4 Sec. 18, T8S, R84W in Pitkin County, Hydrologic Unit 14010004. Located on right bank at upstream end of flume constructed to carry Rocky Fork Creek across spillway to auxiliary outlet of Ruedi Dam on Fryingpan River and 4.6 mi west of Meredith, CO.

DRAINAGE AREA. -- 12.3 mi<sup>2</sup>.

ME

WTR YR 2007

TOTAL

GAGE.—Steven's A-35 graphic water-stage recorder and shaft encoder in standard 42" corrugated metal shelter and well in stream. Shaft encoder is hardwired to DCP in control house on Ruedi Dam, allowing satellite transmission. Satellite monitoring equipment owned and maintained by USBR. Recorder and shaft encoder are set by inside drop tape from an adjustable reference point on the instrument shelf. Primary record is satellite data and chart record is used for backup. Control is 38-ft. wide, v-notch, sharp crested weir. Elevation of gage is 7,494.50 ft.

REMARKS.--Record is complete and reliable, except for periods when the well was frozen: Nov 15, 2006 through Mar 9, 2007. Record is good, except for the winter period when the well was frozen, which is considered poor. There are no diversions above the station. Station maintained by Division 5 staff and record developed by Craig Bruner.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE.--RFCMERCO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

				,	ME	EAN VALUE	IS					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	3.0	2.6	2.1	1.6	1.7	4.7	11	34	12	5.6	3.3
2	3.3	3.0	2.5	2.1	1.6	1.7	4.6	16	35	12	5.4	3.3
3	3.5	3.0	2.5	2.1	1.6	1.7	4.6	20	36	11	5.1	3.2
4	3.5	3.0	2.5	2.1	1.6	1.7	4.5	22	37	11	5.0	3.0
5	3.7	2.9	2.5	2.1	1.6	1.7	4.7	22	38	10	4.9	3.0
6	3.9	2.8	2.5	2.0	1.5	1.7	4.8	20	39	9.7	4.8	3.0
7	4.2	2.8	2.5	2.0	1.5	1.7	4.9	17	37	9.5	4.8	3.0
8	4.2	2.8	2.5	2.0	1.5	1.8	4.9	15	34	9.3	5.0	3.1
9	4.2	2.8	2.4	2.0	1.5	1.9	4.9	14	32	8.9	5.1	3.1
10	4.2	2.8	2.4	2.0	1.5	1.9	5.1	13	31	8.5	5.0	3.1
11	4.0	2.8	2.4	2.0	1.6	1.9	5.1	14	30	8.0	4.7	3.0
12	3.9	2.8	2.4	1.9	1.6	2.1	5.1	16	34	7.7	4.5	2.9
13	3.8	2.8	2.4	1.9	1.6	2.4	4.9	21	33	7.4	4.3	2.8
14	3.8	2.8	2.4	1.9	1.6	2.6	4.8	30	32	7.3	4.2	2.8
15	3.8	2.8	2.4	1.9	1.6	2.9	4.7	34	31	7.4	4.1	2.7
16	3.6	2.8	2.4	1.9	1.6	2.9	4.7	36	30	7.2	4.0	2.6
17	3.9	2.8	2.3		1.6	3.0	4.7	37	29	7.0	4.0	2.8
18	4.0	2.7	2.3		1.6	3.2	4.7	36	29	6.7	4.0	2.7
19	4.0	2.7	2.3		1.6	3.5	4.7	38	27	6.6	4.0	3.3
20	4.0	2.7	2.3		1.6	3.8	4.7	39	25	6.4	4.0	3.8
21	3.9	2.7	2.3		1.6	4.1	4.9	39	24	6.8	3.9	3.8
22	3.8	2.7	2.3		1.6	4.3	5.1	41	22	6.7	3.8	3.5
23 24	3.7 3.5	2.7	2.2		1.6	4.6	5.4	37 32	21 19	6.6	3.7	3.2
24 25	3.5	2.7	2.2		1.6	5.2	5.8 6.2	28	19	6.4	3.6	3.0
25 26	3.4	2.6			1.7 1.7	5.6 5.5	6.5	28 27	16	6.3 6.1	3.4 3.3	2.9
26 27	3.3	2.6	2.2		1.7	5.4	6.7	27	15	6.1	3.3	3.0 3.1
28	3.1	2.6	2.2		1.7	5.4	6.9	28	14	5.9	3.3	3.1
20 29	3.1	2.6	2.2		1.7	5.2	7.0	31	14	5.9	3.3	3.1
30	3.0	2.6	2.1			5.0	7.8	32	13	5.9	3.3	3.0
31	3.0	2.0	2.1			4.8	7.0	33		5.7	3.3	
JΙ	3.0		2.1	1.0		4.0		33		J. /	٥.٥	
TOTAL	113.9	83.0	72.7	58.3	44.7	101.0	158.1	826	828	242.0	130.7	92.2
4EAN	3.67	2.77	2.35	1.88	1.60	3.26	5.27	26.6	27.6	7.81	4.22	3.07
AC-FT	226	165	144	116	89	200	314	1640	1640	480	259	183
XAN	4.2	3.0	2.6	2.1	1.7	5.6	7.8	41	39	12	5.6	3.8
NIN	3.0	2.6	2.1	1.6	1.5	1.7	4.5	11	13	5.7	3.3	2.6
CAL YR	2006	TOTAL	2878.7	MEAN	7.89 MAX	6	31 MIN	1.6	AC-FT	5710		

MAX DISCH: 42.6 CFS AT 23:30 ON May. 21, 2007 GH 1.20 FT. SHIFT 0.04 FT. MAX GH: 1.20 FT. AT 23:30 ON May. 21, 2007

7.54 MAX

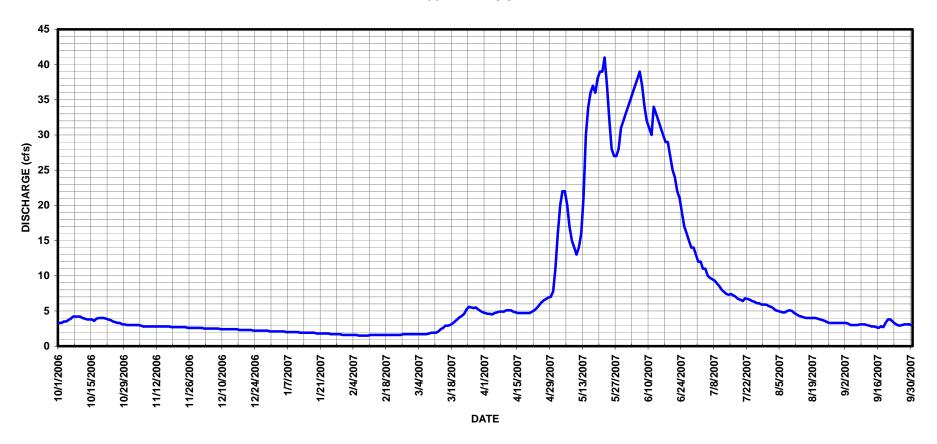
FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

2750.6 MEAN

41 MIN

1.5 AC-FT

# 09080300 ROCKY FORK CREEK NEAR MEREDITH CO WY2007 HYDROGRAPH



#### CRYSTAL RIVER AT DOW FISH HATCERY NEAR CARBONDALE, CO

LOCATION.--Lat 39° 22'38'', long 107° 12'17'' in SW1/4 NE1/4 Sec. 10, T8S, R88W in Garfield County. Located on right bank of Crystal River, at upstream side of County Road 118 bridge, and 0.75 mi. below confluence with Prince Creek.

DRAINAGE AREA. --N/A.

GAGE.--Sutron Model 5600 Accububble sensor and Sutron SatLink 2 data collection platform (DCP) housed in 2'-0" rectangular steel shelter. Accububble sensor is referenced to a drop tape to water surface from outside reference points on county bridge railing. Primary record is satellite data, with the DCP log used as a backup.

REMARKS.--Fifteen minute satellite data were used to develop record. The record is complete for the period of operation. The record is reliable except for the following periods: May 1-13 due to orifice line plugging; July 16, 2007 due to orifice line repairs; May 15, 16, 23, 24, 28-31; June 16, 23, 24, 30; July 2-15, 23, 27-28; August 3, 30-31; Sep 2, 11, 13, 14, 25-30, 2007 due to abrupt high and low spikes in the accububble gage height record. Record is fair, except for periods of estimated daily discharge and erratic accububbler performance, which are poor. The gage is operated on a seasonal basis (Apr 1 - Oct 31 only). The gage was started in operation in late October 2006. WY2007 is the first year to publish this record. Gaging station operated and maintained by James Kellogg. Discharge record was developed by James Kellogg and Tom Ley.

RATING TABLE. -- CRYDOWCO04 USED FROM 01-APR-2007 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							293	1200	1360	455	131	57
2							287	1290	1470	412	122	55
3							286	1270	1670	381	115	56
4							299	1170	1670	348	112	59
5							344	890	1850	330	104	57
6							370	680	1710	301	233	67
7							404	540	1110	272	181	62
8							420	460	855	267	141	51
9							403	460	838	237	121	46
10							407	510	1080	213	108	45
11							354	710	1290	209	102	45
12							331	1110	1490	215	90	38
13							306	1470	1240	237	81	30
14							283	1780	1280	209	82	29
15							286	1550	1370	233	96	29
16							317	1760	1500	234	112	29
17							339	1530	1540	164	137	340
18							328	1520	1350	156	96	222
19							330	1660	1110	172	88	116
20							362	1780	1030	257	79	80
21							423	1650	987	221	73	68
22							405	1610	916	198	70	59
23							402	1190	812	278	68	276
24							396	940	799	207	69	367
25							354	767	736	191	65	214
26							336	708	640	212	62	157
27							350	786	632	239	58	129
28							451	1140	594	284	60	113
29							645	1490	543	201	60	107
30							901	1230	493	163	62	105
31								1220		143	60	
TOTAL							11412	36071	33965	7639	3038	3108
MEAN							380	1164	1132	246	98.0	104
AC-FT							22640	71550	67370	15150	6030	6160
MAX							901	1780	1850	455	233	367
MIN							283	460	493	143	58	29

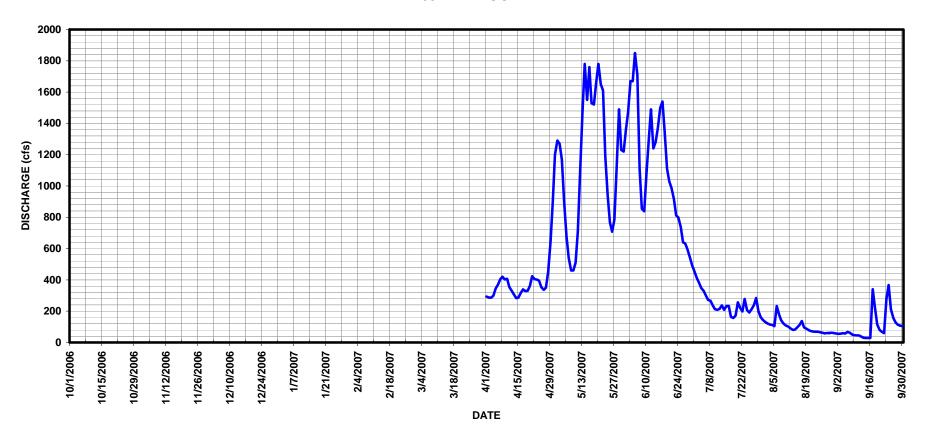
WTR YR 2007 TOTAL 95233 MEAN 520 MAX 1850 MIN 29 AC-FT 188900 (PARTIAL YEAR RECORD)

MAX DAILY DISCH: 1850 CFS ON JUN 5, 2007

MAX GH: NOT DETERMINED (OCCURRED DURING PERIOD OF ESTIMATED RECORD)

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# CRYSTAL RIVER AT DOW FISH HATCERY NEAR CARBONDALE CO WY2007 HYDROGRAPH



#### ROARING FORK RIVER BASIN

### WEST DIVIDE CREEK NEAR RAVEN, CO

- LOCATION.--Lat 39° 19'52", long 107° 34'46" in NE1/4 SW1/4 Sec. 29, T8S, R91W, Hydrologic Unit 14010004 in Mesa County. Station is on left bank about 5 ft downstream of private road bridge, 0.8 mi upstream of Brook Creek, 8 mi south of Raven, and 16 mi south of Silt.
- DRAINAGE AREA.-- 64.6 mi<sup>2</sup>. October 1955 to September 1999. Beginning October 1999, station operated seasonally by USGS. Seasonal operation of gage by Colorado Division of Water Resources began in November 2005. Gage at same site and datum since establishment.
- GAGE.--Model 5600 Accububble sensor in corrugated metal shelter on 42" diameter stilling well. Data collection platform (DCP) is a Sutron SatLink 2 in external box. Well intake pipes are isolated from the stream during low stages. Accububble is referenced by drop tape from outside reference point on adjacent bridge and inside adjustable reference point on the edge of the instrument shelf (when well not isolated from stream). Construction of an outside cantilever chain gage was begun in Sep 2007. Satellite data is primary record.
- REMARKS.--The gage is operated seasonally and was operated from April 1 through September 30, 2007. Record is complete and reliable for the period of operation except for: Apr. 1-2, 2007: no gage height record; May 21-31, and June 1-8, 2007: bubbler performance was erratic. The muffler was repaired on 7/11/2007. Record is good, except for periods of no gage height record, April 1-2, and estimated periods, May 21-31, and Jun 1-8, which are rated poor. Record includes trans-basin water diverted from Thompson Creek, Clear Fork, and Owens Creek. Station was maintained by James Kellogg and Craig Bruner and record was developed by James Kellogg and Craig Bruner. Diversion records were maintained by Steve Trexel.

RATING TABLE. -- WSDRAVCO14 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

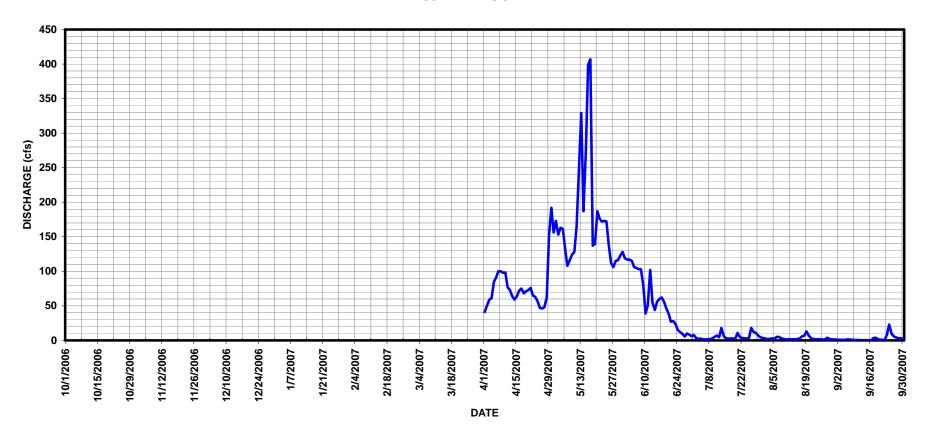
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							41	156	119	7.8	2.7	1.2
2							50	173	117	3.3	2.2	.93
3							59	153	117	2.3	2.2	.69
4							61	163	115	2.6	3.1	.71
5							85	161	106	1.3	2.3	.85
6							91	132	105	1.3	5.2	1.3
7							100	108	103	1.7	5.2	1.1
8							100	116	103	1.8	3.1	.78
9							98	124	79	2.8	2.0	.57
10							98	128	39	5.0	1.5	.46
11							77	165	51	6.9	1.3	.42
12							73	244	102	4.6	1.4	.34
13							64	329	55	18	1.6	.29
14							59	187	44	5.7	1.5	.23
15							64	275	56	3.3	1.9	.25
16							72	399	60	2.5	2.6	.25
17							75	407	62	2.7	5.7	3.0
18							68	137	56	2.7	6.7	3.9
19							71	140	46	2.6	13	1.8
20							73	187	39	11	6.9	1.1
21							76	176	27	4.9	3.0	.80
22							65	172	28	3.5	2.0	.70
23							63	173	24	2.9	1.5	8.4
24							57	172	15	2.8	1.8	23
25							47	137	12	3.4	1.6	9.7
26							46	112	9.8	18	1.1	5.7
27							48	106	5.6	12	1.4	4.2
28							62	115	10	11	3.6	3.3
29							152	116	8.4	6.8	2.2	2.7
30							192	123	6.1	4.4	1.5	2.8
31								128		3.4	1.3	
TOTAL							2287	5414	1719.9	163.0	93.1	81.47
MEAN							76.2	175	57.3	5.26	3.00	2.72
AC-FT							4540	10740	3410	323	185	162
MAX							192	407	119	18	13	23
MIN							41	106	5.6	1.3	1.1	.23

WTR YR 2007 TOTAL 9758.47 MEAN 53.3 MAX 407 MIN .23 AC-FT 19360 (PARTIAL YEAR RECORD)

MAX DISCH: 535 CFS AT 05:15 ON May. 17, 2007 GH 4.48 FT. SHIFT .01 FT. MAX GH: 4.97 FT. AT 05:15 ON May. 17, 2007 (DATUM CORR. -0.49 FT)

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## WEST DIVIDE CREEK NEAR RAVEN CO WY2007 HYDROGRAPH



#### YAMPA RIVER BASIN

## YAMPA RIVER ABOVE LAKE CATAMOUNT, CO

LOCATION.--Lat. 40°20'27", long. 106°48'29", (Blacktail Mountain, Colorado Quadrangle), SE1/4,SE1/4 in Section 33, T5N, R84W of the Sixth Principal Meridian in Routt County, at County Road 18C bridge.

DRAINAGE AREA. -- 361 sq mi (from topographic maps).

PERIOD OF RECORD. -- Spot records from staff gage installed at current site and datum kept from April 1989 to October 2003 with some record dating back to 1978. Continuous records kept from October 2003 to present.

GAGE.--High data rate Sutron Satlink logger with satellite telemetry and shaft encoder housed in a 42-inch diameter corrugated metal pipe shelter and stilling well. Stilling well equipped with two 1.5-inch intakes connected to risers. Shaft encoder referenced to inside staff gage (0.00 to 6.66 feet) located on the inside wall of the well. Approximate elevation of gage is 6880 ft (from topographic map).

REMARKS.--Primary record is hourly data developed from the DCP data log of 15-minute observations. Continuous gage height records were kept from October 1, 2006 to September 30, 2007. The record is complete and reliable except for the following days: November 30, 2006; December 1-11, 19, 21-25, and 30-31, 2006; January 1-3, 6-11, and 13-31, 2007; February 1-4, 2007; and, March 1-5, 2007 due to possible ice effect. The record is good, except for the periods of ice effect, during which flows were estimated. These data points are considered poor. Station maintained and record developed by Jean Ray.

RATING TABLE. -- YAMABVCO10 USED FROM 01-OCT-2006 TO 30-SEP-2007

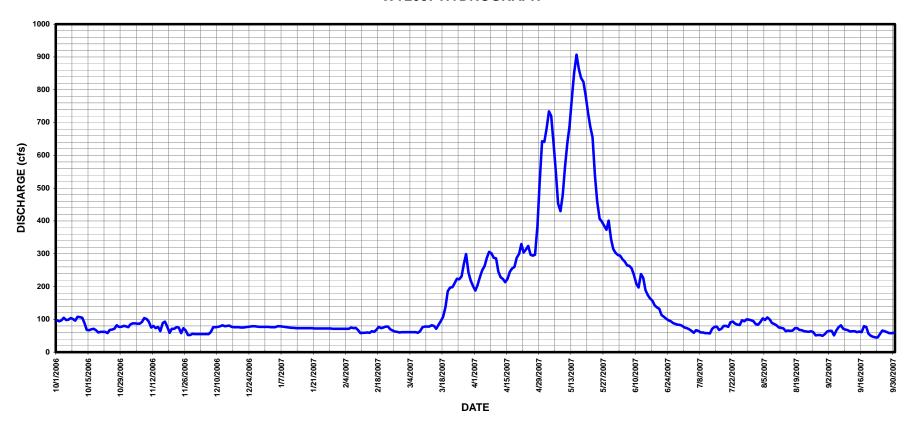
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	76	55e	77e	71e	61e	188	641	303	75	85	63
2	94	85	55e	76e	71e	61e	205	681	296	73	84	65
3	97	88	55e	76e	71e	61e	230	734	294	70	92	65
4	105	88	55e	76	71e	61e	250	720	283	65	103	51
5	98	87	55e	79	71	61e	263	635	276	59	98	66
6	99	87	55e	79e	75	61	288	550	265	67	106	76
7	104	92	62e	78e	73	59	306	453	263	65	100	82
8	101	104	76e	77e	74	64	301	430	255	60	89	71
9	96	101	76e	76e	67	76	288	479	234	60	86	69
10	108	93	77e	75e	58	78	286	569	209	58	82	67
11	107	75	79e	74e	59	78	246	638	197	58	75	63
12	105	80	82	74	59	78	229	689	238	57	74	64
13	89	73	79	73e	60	82	223	776	227	71	72	64
14	68	77	80	73e	59	80	213	852	189	77	64	61
15	67	64	81	73e	64	71	224	907	174	78	66	63
16	70	89	77	73e	62	84	245	864	164	68	65	61
17	71	93	76	73e	69	95	255	836	157	71	66	79
18	67	78	76	73e	77	108	260	824	143	80	73	77
19	60	59	76e	73e	73	138	288	782	136	80	73	56
20	62	71	75	73e	75	186	300	729	132	77	68	50
21	62	71	75e	72e	78	197	330	687	113	91	67	47
22	62	76	76e	72e	78	198	304	655	108	93	64	45
23	58	75	77e	72e	70	210	313	538	102	87	63	45
24	68	58	78e	72e	66	224	324	459	97	84	62	55
25	69	73	79e	72e	63	222	297	407	94	83	64	66
26	71	66	79	72e	62	231	294	398	89	97	61	64
27	82	52	78	72e	60	269	297	386	86	94	51	61
28	77	52	77	72e	61	299	384	373	84	100	52	58
29	77	56	77	71e		243	519	401	83	99	52	58
30	80	55e	77e	71e		218	643	345	80	97	50	59
31	79		77e	71e		201		314		94	55	
TOTAL	2550	2294	2252	2290	1897	4155	8793	18752	5371	2388	2262	1871
MEAN	82.3	76.5	72.6	73.9	67.7	134	293	605	179	77.0	73.0	62.4
AC-FT	5060	4550	4470	4540	3760	8240	17440	37190	10650	4740	4490	3710
MAX	108	104	82	79	78	299	643	907	303	100	106	82
MIN	58	52	55	71	58	59	188	314	80	57	50	45
CAL YR	2006	TOTAL	78078 ME		214 MAX	181		50		154900		
WTR YR	2007	TOTAL	54875 ME	AN	150 MAX	90	7 MIN	45	AC-FT	108800		

MAX DISCH: 1010 CFS AT 00:00 ON May 15, 2007 GH 4.05 FT. SHIFT -0.03 FT. MAX GH: 4.15 FT. (ICE-AFFECTED) AT 11:30 ON Feb. 3, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e=estimated

## YAMPA RIVER ABOVE LAKE CATAMOUNT CO WY2007 HYDROGRAPH



#### YAMPA RIVER BASIN

## 09238500 WALTON CREEK NEAR STEAMBOAT SPRINGS, CO

LOCATION.--Lat. 40°24'29", long. 106°47'11", (Steamboat Springs, Colorado, Quad., scale, 1:24,000), in SW1/4 of the NW1/4, in Section 11, T5N, R84W, (projected), Routt County, on left bank 0.4 miles downstream from Beaver Creek, 0.6 miles downstream from Storm King Creek, 4.5 miles upstream from its confluence with the Yampa River, and 6.0 miles southeast of Steamboat Springs.

DRAINAGE AREA.--42.4 sq mi (from topographic maps)

PERIOD OF RECORD.--1920 to 1922, State Engineer's Office; re-established 0.2 mile upstream 1965 to 1973, by USGS; re-established 1982 to 1987 by USGS at same datum; re-established by the State Engineer's Office in October of 1995, at the same datum as the USGS.

GAGE.--Stevens A-71 water stage recorder and Sutron 8200A data collection platform (DCP) with shaft encoder housed in a 6-ft by 42-inch corrugated metal shelter on a 6-ft by 42-inch metal well. Control is a concrete weir across stream. Approximate elevation of gage is 7,050 ft (from topographic map).

REMARKS.--Primary record is 15-minute data from the DCP with chart backup. Continuous gage height records were kept from October 1 to November 1, 2006 and April 25 to September 30, 2007. Gage height record was estimated between November 2-8, 2006. Records were not kept during the winter period (November 9, 2006 to April 24, 2007), due to site accessibility and frozen channel issues. The record is complete, reliable, and good, except for: November 2-8, 2006 and April 25-27, 2007, which were ice affected, and flows were estimated using adjacent good data and temperature data, and are considered poor; and April 25 to June 23, 2007, which are considered fair to poor, and are periods when flows exceeded twice the highest measurement. This period also covers the time occurrence of the peak discharge, which is considered poor. Station maintained and record developed by Jean Ray.

RATING TABLE. -- WLTNCKCO08 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE,	IN CFS	, WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007
		]	MEAN '	VALUES				

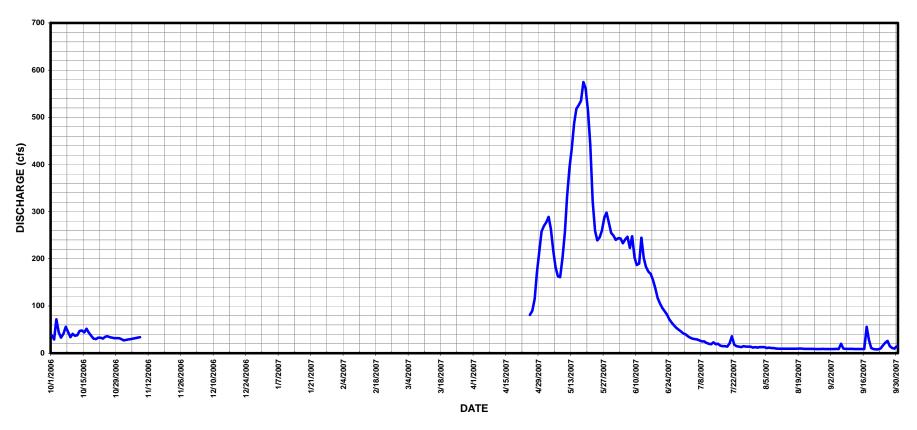
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	27						270	240	40	12	8.7
2	29	28e						277	244	36	13	8.7
3	72	29e						289	243	33	13	8.7
4	44	30e						264	233	31	13	9.0
5	33	31e						218	241	30	11	8.8
6	41	32e						183	247	29	12	20
7	56	33e						163	223	27	11	10
8	45	34e						161	248	25	11	9.2
9	34							202	203	25	10	9.2
10	41							257	187	22	9.6	9.2
11	37							332	190	20	9.6	9.0
12	38							393	245	19	9.6	8.7
13	47							433	202	23	9.6	8.7
14	48							487	183	19	9.6	8.7
15	44							518	173	20	9.6	8.7
16	52							526	168	16	9.6	8.8
17	43							535	155	15	9.6	56
18	37							575	137	15	9.6	28
19	31							561	117	14	10	11
20	30							512	105	21	10	8.9
21	33							442	96	36	9.2	8.3
22	33							322	89	18	9.1	8.3
23	31							259	82	15	9.1	9.9
24	35							239	72	14	9.2	16
25	36						81e	246	65	13	9.2	22
26	34						90e	260	59	15	8.8	26
27	33						115e	287	54	14	8.7	15
28	32						171	298	50	14	8.9	11
29	32						216	276	46	14	9.1	9.9
30	32						258	255	42	12	8.7	15
31	30							249		13	8.7	
TOTAL	1201	244					931	10289	4639	658	311.1	399.4
MEAN	38.7	30.5					155	332	155	21.2	10.0	13.3
AC-FT	2380	484					1850	20410	9200	1310	617	792
MAX	72	34					258	575	248	40	13	56
MIN	29	27					81	161	42	12	8.7	8.3

65240 (PARTIAL YEAR RECORD) TOTAL 32891 MEAN TOTAL 18672.5 MEAN 163 F.... 94.3 MAX CAL YR 2006 163 MAX 1040 MIN 10 AC-FT 8.3 AC-FT WTR YR 2007 575 MIN 37040 (PARTIAL YEAR RECORD)

MAX DISCH: 833 CFS AT 19:00 ON May. 18, 2007 GH 2.34 FT. SHIFT 0.02 FT. MAX GH: 2.34 FT. AT 19:00 ON May. 18, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

## 09238500 WALTON CREEK NEAR STEAMBOAT SPRINGS CO WY2007 HYDROGRAPH



#### NORTH PLATTE RIVER BASIN

## 06616500 MICHIGAN RIVER NEAR MEADOW CREEK RESERVOIR

LOCATION.--Lat. 40°36'48", Long. 106°05'05", (Gould, Colorado Quadrangle, 1955), SE1/4 of the SE1/4 in Section 36
T8N, R78W in Jackson County. Under bridge on County Road 30 about 700 feet upstream of its confluence with Peterson Creek.

DRAINAGE AREA. -- Approximately 99 sq. mi.

PERIOD OF RECORD.--Formerly known as the Michigan River near Gould station and was relocated due to removal of bridge location. Station has been in operation at present location since 1997.

GAGE.--Sutron Satlink 2 high data rate data collection platform with satellite monitoring equipment and shaft encoder in a 12-inch stilling well installed in the river channel at the downstream end of the right bridge abutment. On September 25, 2007, an 18-inch diameter corrugated metal pipe stilling well with two 2-inch intakes was installed at downstream end of right bridge abutment. An outside staff gage ranging from of 0.00 to 6.66 feet located just upstream of the well is primary reference gage. Approximate elevation gage is 8500 ft (from topographic map).

REMARKS.--Primary record is 15 minute data from the DCP. Continuous gage height records were kept from October 1 to November 15, 2006 and March 25 to September 30, 2007. Record was not kept during the winter period. The record is complete and reliable except for November 13-15, 2006 when the float was frozen in ice in the stilling well. The site was shut down for the winter on November 15, 2006 due to freezing onditions. The site was re-opened on March 25, 2007. The partial-day data for March 25, 2007 was used to estimate the flow on this date. The record is good except for the periods November 13-15, 2006 and March 25, 2007, which were estimated and are considered poor. Station maintained and record developed by Jean Ray.

RATING TABLE. -- MICMERCO06 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

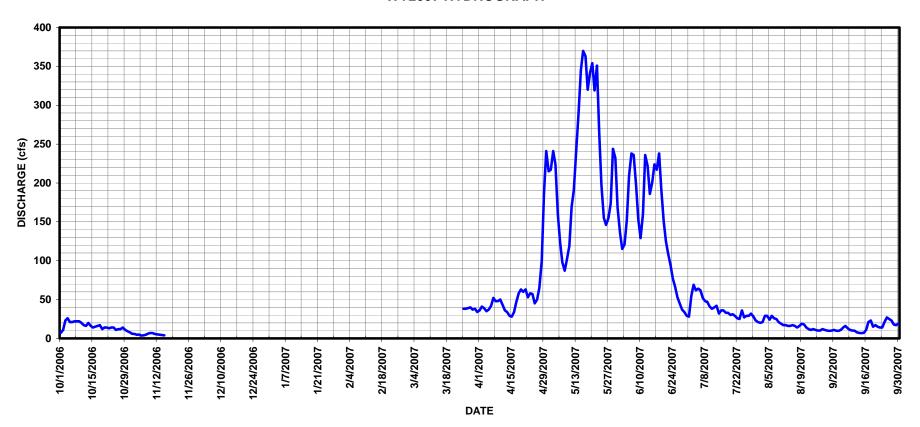
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	6.0					36	215	136	28	20	10
2	11	5.8					41	217	115	55	21	11
3	23	4.8					39	241	121	69	29	9.8
4	26	4.9					35	224	152	62	29	9.7
5	21	3.8					37	160	209	64	24	11
6	21	3.9					42	124	238	62	29	14
7	22	4.8					52	98	236	52	26	16
8	22	6.1					48	87	197	48	25	13
9	22	7.1					48	102	153	47	21	11
10	20	6.8					50	119	129	41	19	10
11	17	5.5					43	169	160	38	17	9.8
12	16	5.1					36	191	236	40	17	7.8
13	20	4.8e					34	242	222	42	16	7.1
14	16	4.4e					29	288	186	32	16	6.8
15	14	4.0e					28	345	201	36	17	7.2
16	15						34	370	224	36	16	11
17	16						47	363	217	33	14	21
18	17						58	320	238	33	16	23
19	12						63	341	192	30	19	15
20	14						60	354	151	31	18	17
21	14						63	319	125	29	14	15
22	13						53	351	109	26	12	14
23	14						58	265	94	25	11	14
24	14						57	197	77	36	12	21
25	11					38e	45	155	66	27	11	27
26	12					38	50	146	53	29	10	25
27	12					39	65	155	45	29	10	23
28	14					40	100	174	37	32	12	18
29	11					37	187	244	34	28	11	17
30	9.3					38	241	232	29	23	10	19
31	7.9					34		168		21	9.7	
TOTAL	484.3	77.8				264	1779	6976	4382	1184	531.7	434.2
MEAN	15.6	5.19				37.7	59.3	225	146	38.2	17.2	14.5
AC-FT	961	154				524	3530	13840	8690	2350	1050	861
MAX	26	7.1				40	241	370	238	69	29	27
MIN	7.1	3.8				34	28	87	29	21	9.7	6.8
CAL YR	2006	TOTAL		1EAN	50.4 MAX	341		3.4	AC-FT			AR RECORD)
WTR YR	2007	TOTAL	16113 M	1EAN	68.3 MAX	370	MIN	3.8	AC-FT	31960 (1	PARTIAL YE	AR RECORD)

MAX DISCH: 412 CFS AT 06:15 ON May. 16, 2007 GH 2.95 FT. SHIFT 0.12 FT. MAX GH: 2.95 FT. AT 06:15 ON May. 16, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

e=estimated

## 06616500 MICHIGAN RIVER NEAR MEADOW CREEK RESERVOIR CO WY2007 HYDROGRAPH



#### NORTH PLATTE RIVER BASIN

### 06617100 MICHIGAN RIVER NEAR WALDEN, CO

LOCATION.--Lat. 40°44'27", Long. 106°16'54", (Walden, Colorado Quadrangle, 1955), NW1/4 NW1/4 in Section 21 T9N, R79W in Jackson County. Station was moved downstream approximately one-quarter of a mile to a location just upstream of the Highway 125 bridge in October 2004, on Jackson County property at Town of Walden Water Facility.

DRAINAGE AREA. -- Approximately 182 sq. mi.

PERIOD OF RECORD.--Originally established by the USGS at a location believed to be just upstream of the present location in May 1904. Records kept by the USGS from May 1904 to October 1905 and May 1923 to October 1947. Re-established by the State Engineer's Office in May 2002. Records kept by the Town of Walden from 1916 to present.

GAGE.--Sutron shaft encoder and high data rate 8210 data collection platform (DCP) with satellite telemetry housed in a steel shelter mounted on top of a 24-inch diameter corrugated metal pipe stilling well with two two-inch diameter inlet pipes. Drop tape referenced to an RP on the instrument shelf was the primary reference gage until June 14, 2006, when an electric drop tape was installed, and has been the primary reference gage since that time.

REMARKS.--Primary record is 15-minute data from the DCP. Gage height records were kept from October 1 to November 27, 2006 and April 2 to September 30, 2007. Record was not kept during the winter. The record is complete and reliable except for October 18, 19, 22-24, and 26-31, November 1-3, 5-6, 11-15, and 19-27, 2006; and April 11-13, 2007, which were ice-affected; and April 2-9, 2007 due to DCP issues during spring gage startup. The record is good, except for the periods of ice effect and no record, which were estimated and are considered poor. Station maintained and record developed by Jean Ray.

RATING TABLE. -- MICWLDCO12 USED FROM 01-OCT-2006 TO 30-SEP-2007

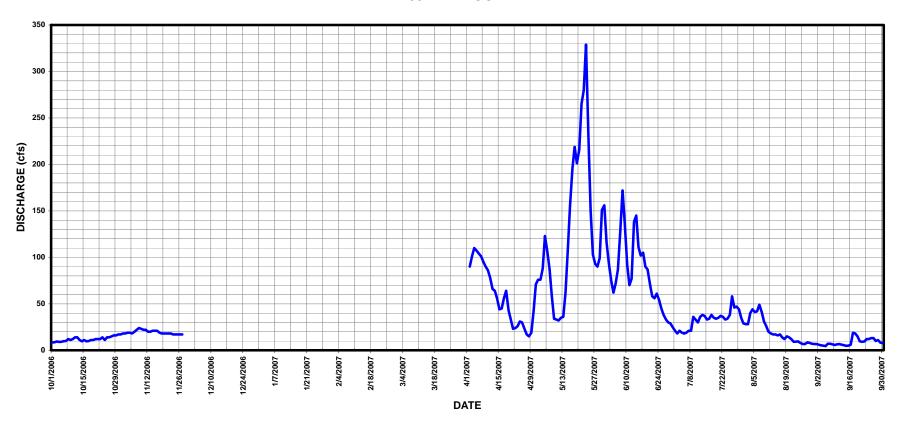
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	18	e					71	116	21	28	6.8
2	8.6	18	e				90e	76	94	18	28	6.1
3	9.4	19	e				101e	76	75	21	40	5.3
4	9.0	19					110e	88	62	19	44	5.0
5	9.1	18	e				107e	123	72	18	41	4.5
6	9.8	20	e				104e	106	87	19	42	7.1
7	10	22					101e	87	129	21	49	7.1
8	12	24					95e	58	172	21	41	6.4
9	1.1	23					90e	34	136	36	31	5.7
10	12	22					86	33	92	33	26	6.3
11	14	22	e				78e	32	70	30	20	6.8
12	14	20					66e	35	77	36	18	6.1
13	11	20	e				64e	36	138	38	17	5.5
14	9.6	21					56	62	145	37	17	4.8
15	11	21	e				44	107	111	33	16	5.0
16	9.7	21					45	155	102	34	17	6.0
17	10	19					56	195	105	38	14	19
18	11e						64	219	90	35	12	18
19	11e						43	201	87	34	15	15
20	12	18					33	216	71	35	14	9.6
21	12	18					23	265	58	37	12	9.1
22	12e						24	280	56	36	9.2	9.5
23	14e						26	329	61	33	9.3	12
24	11e						31	231	54	34	9.4	12
25	14	17	-				30	150	45	38	7.7	13
26	14e		e				23	103	38	58	6.8	13
27	15e		e				17	93	33	46	6.7	10
28	16e						15	90	30	47	8.4	11
29	16e						19	99	29	44	8.0	8.2
30	17e						42	151	25	35	7.1	7.7
31	17e							156		29	6.7	
TOTAL	370.6	522					1683	3957	2460	1014	621.3	261.6
MEAN	12.0	19.3					58.0	128	82.0	32.7	20.0	8.72
AC-FT	735	1040					3340	7850	4880	2010	1230	519
MAX	17	24					110	329	172	58	49	19
MIN	8.4	17					15	32	25	18	6.7	4.5
CAL YR	2006	TOTAL	7211.4	MEAN	32.5 MAX	179	MIN	2.1	AC-FT	14300 (P	ARTIAL YF	AR RECORD)
WTR YR	2007	TOTAL	10889.5	MEAN	45.4 MAX	329		4.5	AC-FT			AR RECORD)
										'		

MAX DISCH: 349 CFS AT 11:45 ON May. 23, 2007 GH 2.82 FT. SHIFT 0.04 FT. MAX GH: 2.82 FT. AT 11:45 ON May. 23, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e=estimated

## 06617100 MICHIGAN RIVER NEAR WALDEN CO WY2007 HYDROGRAPH



#### NORTH PLATTE RIVER BASIN

### 06617500 ILLINOIS RIVER NEAR RAND, CO

LOCATION. -- Lat. 40°27'45", Long. 106°10'30", (Rand Quadrangle, 1956), in SW1/4 of the NE1/4 of Section 29, T6N, R78W in Jackson County, on right upstream bridge abutment on Jackson County Road 27.

DRAINAGE AREA. -- Approximately 70.6 sq. mi. (from topographic maps).

PERIOD OF RECORD. -- Established by the State Engineer's Office. Formerly published as Illinois Creek near Rand (1931-1940) at similar location. Hydrographic measurements taken in 1981 and 1985, but no records were kept. Records kept from 1987 to present. Records published in 1995 and 2002 through the present.

GAGE. -- Shaft encoder housed in a metal box on top of 12-inch diameter well with 1-inch diameter pipe protruding from well into the water. The well is located upstream of right bridge abutment with outside staff located just to the left on abutment. Shaft encoder is connected to a Sutron 8200A data collection platform (DCP) with satellite telemetry located several meters back from the channel bank in a grey housing box. On Septembert 26, 2007, the shaft encoder shelter and stilling well were replaced with an 18" diameter CMP stilling well with two 2-in intakes. A Sutron Satlink DCP with high data rate satellite telemetry was also installed on that date. Approximate elevation of gage is 8550 feet.

REMARKS.--Primary record through September 26, 2007 is hourly data from the DCP, after which it is 15-minute data from the DCP. Continuous gage height records were kept from October 1 to November 15, 2006 and March 27 to September 30, 2007. Record was not kept during the winter: November 16, 2006 to March 26, 2007. The record is complete and reliable, except for: October 23-24 and 28-29, 2006 and November 1-3, 2006, which were ice affected; and November 12-15, 2006 and March 27 and 29-31, 2007, which were days with no gage height record. The record is good, except for periods of ice effect and no gage height record, which are considered poor. The period May 3-5 and 13-23, 2007 should be considered fair to poor since the average daily flow exceeded the highest measured flow this water year by 200%. Station maintained and record developed by Jean Ray.

RATING TABLE. -- ILLRANCO05 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE,	ΙN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007	
	T .	/FAN \	/ALUES							

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	6.0e					24	124	66	38	11	6.1
2	7.0	6.0e					28	121	60	35	12	5.1
3	6.8	6.0e					35	137	63	34	20	4.7
4	5.2	6.1					35	144	71	41	19	4.7
5	4.5	7.0					40	137	79	36	15	4.9
6	4.5	6.2					50	113	91	37	22	8.3
7	6.8	7.1					56	93	92	33	18	8.8
8	6.8	8.5					53	80	91	31	16	7.0
9	5.9	9.8					42	72	72	29	13	5.5
10	5.7	8.5					45	68	60	25	11	5.2
11	6.0	8.1					32	80	56	21	8.9	4.9
12	5.9	6.0e					29	106	75	21	8.0	4.6
13	5.4	6.0e					26	138	90	21	8.3	4.4
14	5.1	8.0e					26	175	84	19	7.8	4.2
15	5.5	8.0e					35	199	83	17	8.8	4.2
16	5.7						49	202	86	16	8.3	4.4
17	6.5						51	198	89	15	7.6	12
18	8.1						54	170	92	18	11	18
19	6.4						61	167	80	24	12	11
20	6.9						56	163	70	27	9.5	8.6
21	8.1						66	155	60	21	7.3	7.4
22	8.4						58	166	53	17	5.9	6.7
23	8.0e						68	147	50	16	5.7	6.8
24	7.0e						70	114	51	19	6.7	11
25	8.6						63	85	50	17	6.0	16
26	9.5						65	75	45	15	5.2	14
27	12					31e	65	72	38	18	5.3	12
28	8.0e					39	80	76	41	28	5.3	11
29	8.0e					30e	99	92	44	19	5.3	10
30	8.7					42e	119	95	39	14	4.9	13
31	8.0					38e		78		12	4.8	
TOTAL	216.5	107.3				180	1580	3842	2021	734	309.6	244.5
MEAN	6.98	7.15				36.0	52.7	124	67.4	23.7	9.99	8.15
AC-FT	429	213				357	3130	7620	4010	1460	614	485
MAX	12	9.8				42	119	202	92	41	22	18
MIN	4.5	6.0				30	24	68	38	12	4.8	4.2

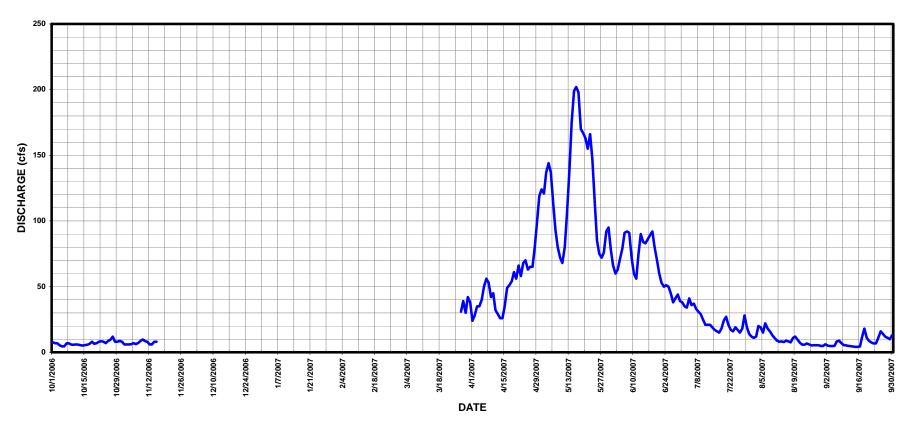
5601.7 MEAN 161 MIN CAL YR 2006 TOTAL 25.6 MAX 2.4 AC-FT 11110 9234.9 MEAN 39.5 MAX 2007 TOTAL 202 MTN 4.2 AC-FT 18320 MAX DISCH: 219 CFS AT 08:00 ON May. 16, 2007 GH 2.48 FT. SHIFT 0.15 FT.

MAX GH: 2.48 FT. AT 08:00 ON May. 16, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

e=estimated

## 06617500 ILLINOIS RIVER NEAR RAND CO WY2007 HYDROGRAPH



#### YAMPA RIVER BASIN

## 09249750 WILLIAMS FORK AT MOUTH NEAR HAMILTON, CO

LOCATION.--Lat. 40°26'14", long. 107°38'50", in SE1/4 of the NW1/4 of Section 31, T6N, R91W, Moffat County, Hydrologic Unit 14050001, on left bank at coal mine service road crossing, 2,300 ft upstream from confluence with Yampa River, 6.1 mi north-northeast of Hamilton, and 8 mi south-southwest of Craig, CO.

DRAINAGE AREA. -- 419 sq mi.

WTR YR 2007

TOTAL

PERIOD OF RECORD. -- Gage established and operated by USGS February 1,1984 to September 30, 2001. Gage reestablished by State Engineer's Office April 26, 2005.

GAGE. -- High data rate Sutron SatLink Logger with satellite telemetry and Sutron Accubar powered by a solar recharged 12-volt battery housed in a 6-foot square shelter over a 4-foot culvert well (no longer in use). Outside gage is a wire weight gage mounted on the upstream side of the bridge almost directly above the orifice. Approximate elevation of gage is 6170 ft (from topographic map).

REMARKS.--Primary record is the transmitted 15-minute satellite data with data from the DCP log used as backup. Continuous gage height records were kept from October 1 through September 30, 2007. The record is complete and reliable, except for: May 30-June 15, 2007 due to the nitrogen gas tank being turned off, and June 16-28, 2007 due to Accubar/gas feed problems and unstable gage height readings. The Accubar/bubbler was plagued with sediment/orifice deposition issues during the periods: February 8-April 30, May 9-11, June 29-July 10, and July 31-August 9, 2007. The record is good, except for the following periods: May 30-June 28, 2007, which is considered poor; February 8-April 30, May 9-11, June 29-July 10, and July 31-August 9, 2007, which are considered fair. Station maintained and record developed by Jean Ray.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- WMFKMHCO07 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	63	75	39	49	55	54	230	999	782e	57	38	20		
2	58	61	46	51	55	48	247	890	728e		36	30		
3	62	74	49	51	56	48	277	753	680e		35	22		
4	123	75	45	54	56	49	283	721	634e		40	21		
5	84	70	51	53	55	54	318	601	587e		46	25		
6	81	68	59	55	52	60	401	453	543e		54	37		
7	153	68	61	54	50	76	431	369	501e		50	45		
8	160	74	59	54	52	71	412	343	461e		46	29		
9	115	81	56	56	52	95	412	395	420e		42	27		
10	106	80	56	56	52	84	450	456	383e	48	35	27		
11	98	64	58	58	56	88	383	621	348e		30	25		
12	87	75	59	58	60	93	355	714	312e	44	29	24		
13	80	58	60	55	59	109	318	960	280e	51	28	24		
14	75	68	63	55	50	153	286	1090	250e	59	29	22		
15	92	63	66	59	59	182	268	1240	244e	45	30	22		
16	94	52	65	60	56	160	315	1210	222e	43	31	27		
17	106	82	59	62	56	156	366	1020	208e	39	35	53		
18	99	76	57	65	50	177	359	995	195e	38	31	91		
19	84	69	58	67	52	206	390	932	180e	42	32	54		
20	79	64	53	67	59	216	390	900	168e		28	41		
21	89	69	57	65	53	242	401	898	156e		27	35		
22	87	76	56	63	63	233	387	978	142e		24	31		
23	80	71	56	62	69	230	405	747	131e		23	34		
24	80	64	57	62	65	244	458	635	121e		21	56		
25	85	56	56	61	52	225	405	595	109e		24	71		
26	96	67	58	60	50	259	355	624	99e		21	57		
27	75	62	61	59	60	280	390	743	90e		22	54		
28	85	54	61	58	56	383	514	840	78e		28	47		
29	89	36	59	55		322	823	919	73	57	26	44		
30	91	35	57	55		259	1050	885e	65	43	19	58		
31	84		48	55		253		833e		39	15			
TOTAL	2840	1987	1745	1794	1560	5109	12079	24359	9190	1431	975	1153		
MEAN	91.6	66.2	56.3	57.9	55.7	165	403	786	306	46.2	31.5	38.4		
AC-FT	5630	3940	3460	3560	3090	10130	23960	48320	18230	2840	1930	2290		
MAX	160	82	66	67	69	383	1050	1240	782	65	54	91		
MIN	58	35	39	49	50	48	230	343	65	35	15	20		
CAL YR	2006	TOTAL	75829	MEAN	208 MAX	150	00 MIN	24	AC-FT	150400				

MAX DISCH: 1640 CFS AT 09:00 ON May 16, 2007 GH 6.48 FT. SHIFT +0.03 FT. MAX GH: 6.48 FT. AT 09:00 ON May 16, 2007

176 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e=estimated

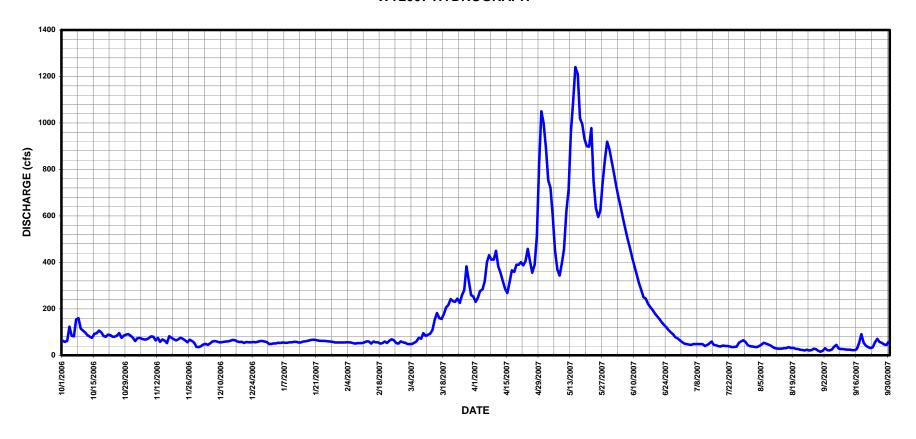
64222 MEAN

1240 MTN

15 AC-FT

127400

## 09249750 WILLIAMS FORK AT MOUTH NEAR HAMILTON CO WY2007 HYDROGRAPH



#### GREEN RIVER BASIN

### POT CREEK AT UTAH-COLORADO STATELINE NEAR VERNAL, UT

LOCATION.--Lat. 40°40'25", long. 109°03'03", (Hoy Mountain, Utah-Colorado Quadrangle), in Section 1, T2S, R25E Salt Lake Meridian in Daggett County, Utah, on left bank approximately 0.2 miles upstream from the Utah-Colorado state line.

DRAINAGE AREA.--107sq mi (from topographic maps)

PERIOD OF RECORD.--Established September 1, 1957 by the USGS; USGS discontinued site September 30, 1982; reestablished Summer 1983 by the State Engineer's Office. Staff gage installed inside well by USGS. Two outside staff gages, one on each bank, installed by State Engineer's Office.

GAGE. -- Stevens A-71 chart recorder and shaft encoder connected to a high data rate Sutron Satlink data logger with satellite telemetry in a 42-inch diameter corrugated metal well on left bank. Well is equipped with two 2-inch intakes with standard inside flushing devices. SatLink data logger is housed in a gray housing box attached to the side of the stilling well. Outside staff gages located on right and left banks with range of 0.00 to 3.33 ft and third staff mounted on inside of well.

REMARKS.--Primary record is hourly data developed from the DCP data log of 15-minute observations. Continuous gage height records were kept from October 1, 2006 through September 30, 2007. The record is complete, with the exception of several 15-minute data points missing from the satellite data (on February 1 and 24, 2007 and April 1, 2007, which coincided with no flow periods at the site). Missing values, therefore, were assumed to be zero. The record is considered fair/poor throughout the record period, because no flow measurements were made. Station maintained and record developed by Jean Ray.

RATING TABLE. -- PTCKSLCO06 USED FROM 01-OCT-2006 TO 30-SEP-2007

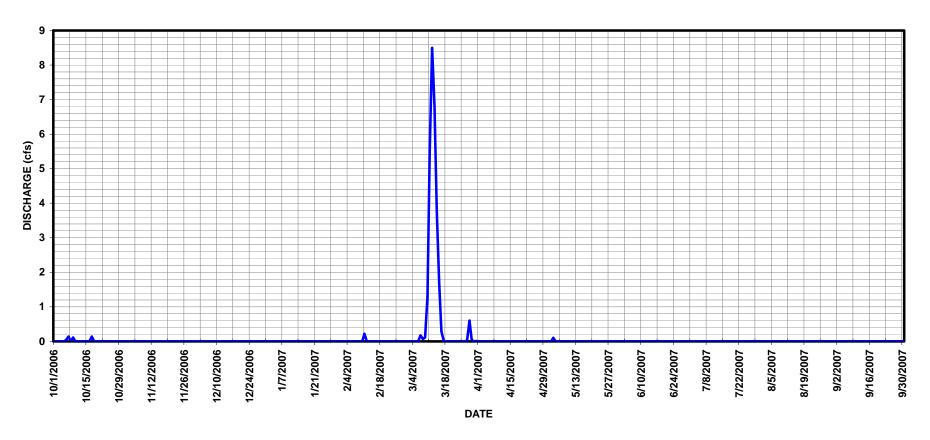
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	.10	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	.04	0	0	0	0	0	0	0	0	0	0	0
7	.14	0	0	0	0	.17	0	0	0	0	0	0
8	0	0	0	0	0	.07	0	0	0	0	0	0
9	.11	0	0	0	0	.11	0	0	0	0	0	0
10	0	0	0	0	0	1.3	0	0	0	0	0	0
11	0	0	0	0	.22	5.5	0	0	0	0	0	0
12	0	0	0	0	0	8.5	0	0	0	0	0	0
13	0	0	0	0	0	6.8	0	0	0	0	0	0
14	0	0	0	0	0	3.8	0	0	0	0	0	0
15	0	0	0	0	0	1.7	0	0	0	0	0	0
16	0	0	0	0	0	.29	0	0	0	0	0	0
17	.14	0	0	0	0	.01	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	.03	0	0	0	0	0	0
28	0	0	0	0	0	.60	0	0	0	0	0	0
29	0	0	0	0		.04	0	0	0	0	0	0
30	0	0	0	0		0	0	0	0	0	0	0
31	0		0	0		.01		0		0	0	
TOTAL	.43	0	0	0	.22	28.93	0	.10	0	0	0	0
MEAN	.014	0	0	0	.008	.93	0	.003	0	0	0	0
AC-FT	.9	0	0	0	. 4	57	0	.2	0	0	0	0
MAX	.14	0	0	0	.22	8.5	0	.10	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
CAL YR	2006	TOTAL	605.65 MEAN		1.66 MAX	80		0	AC-FT	1200		
WTR YR	2007	TOTAL	29.68 MEAN		.081 MAX	8.5	MIN	0	AC-FT	59		

MAX DISCH: 26.6 CFS AT 19:30 ON Mar. 12, 2007 GH 1.52 FT. SHIFT 0.03 FT. MAX GH: 1.52 FT. AT 19:30 ON Mar. 12, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# POT CREEK AT UTAH-COLORADO STATELINE NEAR VERNAL, UT WY2007 HYDROGRAPH



## DOLORES TUNNEL OUTLET NEAR DOLORES, CO

**LOCATION.**—Lat  $37^{\circ}28'00''$ , long  $108^{\circ}32'30''$ , in SW4SE4 sec. 18, T. 37 N., R.15 W., NMPM, Montezuma County.

DRAINAGE AREA. --N/A

GAGE.--Sutron 8200 DCP in a concrete shelter and well at a 15-foot Parshall Flume. An electric tape gage is the primary reference. A Sutron Satlink 2 high data rate DCP was installed on April 25, 2007.

REMARKS.--Records are complete and reliable. Record good. Station maintained by the Dolores Conservancy District and record developed by Brian Boughton.

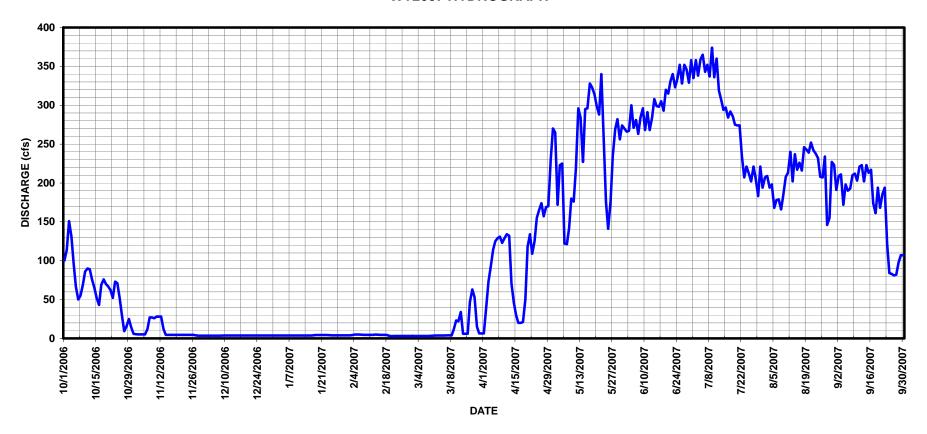
RATING TABLE. -- DOLTUNCO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCH	ARGE, IN C	FS, WATER Y	EAR OCT		TO SEPTE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	5.3	3.4	3.7	4.0	3.1	6.3	270	270	335	207	191
2	114	5.2		3.7	4.0	3.1	38	265	266	358	209	209
3	151	5.2		3.7	4.4	3.1	73	172	267	338	194	211
4	131	5.2		3.7	4.9	3.1	92	223	300	359	198	172
5	96	5.2		3.7	4.9	3.1	114	225	271	365	168	198
6	67	12		3.7	4.9	3.1	125	122	281	343	178	190
7	50	27		3.7	4.7	3.1	129	121	263	352	179	193
8	55	27		3.7	4.6	3.1	131	142	284	337	166	210
9	69	26			4.6	3.2	123	180	296	374	185	212
10	86	28			4.6	3.5	129	176	268	336	208	203
11	90	28			4.6	3.7	134	219	291	360	213	221
12	89	28			4.6	3.7	132	296	268	319	240	223
13	76	12			4.9	3.8	71	284	284	307	202	202
14	65	4.6			4.7	3.8	46	227	308	294	237	223
15	52	4.6			4.6	3.8	30	295	299	297	217	213
16	43	4.6			4.6	4.0	20	296	298	284	226	217
17	69	4.6			4.6	3.9	20	328	305	292	216	174
18	76	4.6			4.4	3.7	21	323	293	286	246	161
19	70	4.6			3.3	12	50	314	320	275	243	194
20	67	4.6			2.9	23	118	299	315	274	239	168
21	62	4.6			3.1	22	134	288	331	274	252	186
22	52	4.6			3.1	34	109	340	340	235	242	194
23	73	4.6			3.1	5.9	125	255	323	207	238	122
24	71	4.6	3.7	4.1	3.1	5.9	155	175	334	221	232	84
25	51	4.6	3.7	4.0	3.1	5.9	165	141	352	212	208	83
26	29	4.6	3.7	4.0	3.1	47	174	176	328	202	207	81
27	9.2	3.9	3.7	4.0	3.1	63	157	235	352	221	234	82
28	16	3.4	3.7	4.0	3.1	53	169	269	346	205	146	98
29	25	3.4	3.7	4.0		15	170	282	329	183	155	107
30	14	3.4	3.7	4.0		6.3	230	256	358	221	227	107
31	5.9		3.7	4.0		6.3		274		194	223	
TOTAL	2024.1	288.0	112.5	121.1	113.6	361.2	3190.3	7468	9140	8860	6535	5129
MEAN	65.3	9.60			4.06	11.7	106	241	305	286	211	171
AC-FT	4010	571		240	225	716	6330	14810	18130	17570	12960	10170
MAX	151	28			4.9	63	230	340	358	374	252	223
MIN	5.9	3.4			2.9	3.1	6.3	121	263	183	146	81
CAL YR	2006	TOTAL	41422.9	MEAN	113 MAX	3	43 MIN	3.4	AC-FT	82160		
WTR YR	2007	TOTAL	43342.8	MEAN	119 MAX	3	74 MIN	2.9	AC-FT	85970		

MAX DISCH: 425 CFS AT 16:45 ON Jul. 9, 2007 GH 3.36 FT. SHIFT 0.03 FT. MAX GH: 3.36 FT. AT 16:45 ON Jul. 9, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## DOLORES TUNNEL OUTLET NEAR DOLORES CO WY2007 HYDROGRAPH



## LONE PINE CANAL BELOW GREAT CUT DIKE NEAR DOLORES, CO

LOCATION.--Lat 37°30′24", long 108°35′28", in NW4SW4 sec. 35, T.38 N., R.16 W., NMPM, Montezuma County.

DRAINAGE AREA. --N/A

GAGE.--Sutron 8200 DCP and shaft encoder in a concrete shelter and well at a 12-foot Parshall Flume. Shaft encoder is set to outside staff gage. A Sutron 8210 high data rate DCP was installed on April 24, 2007.

REMARKS.--Record is complete, reliable, and good for the entire water year. Station maintained by the Dolores Conservancy District and record developed by Brian Boughton.

RATING TABLE.--MVIDIVCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

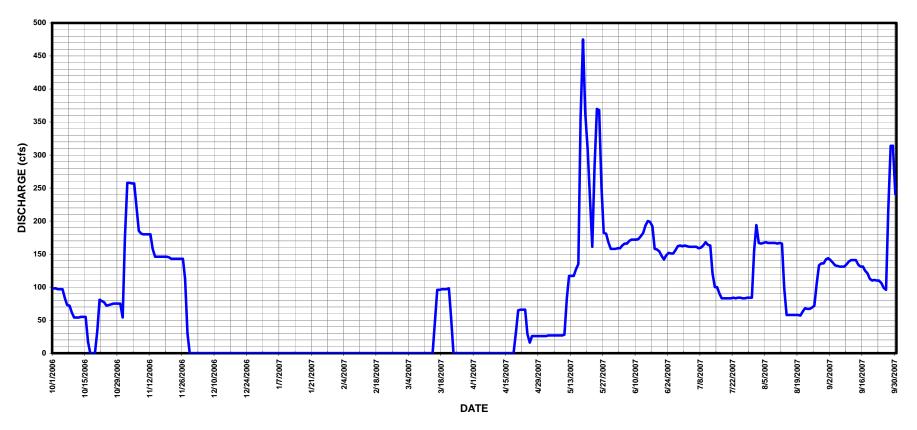
## DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	175	0	0	0	0	0	26	158	163	194	144
2	98	258	0	0	0	0	0	26	159	162	167	141
3	97	258	0	0	0	Ö	0	27	159	161	166	137
4	97	257	0	0	0	0	0	27	163	161	167	133
5	97	257	0	0	0	Ö	0	27	166	161	168	132
6	83	220	0	0	0	Ō	0	27	166	161	167	131
7	73	185	0	0	0	0	0	27	170	159	167	131
8	72	181	Ō	Ō	Ō	Ö	0	27	172	160	167	131
9	62	180	0	0	0	0	0	27	172	163	167	135
10	54	180	0	0	0	0	0	28	172	168	166	139
11	54	180	0	0	0	0	0	83	173	164	167	141
12	54	180	0	0	0	0	0	117	177	163	166	141
13	55	158	0	0	0	0	0	117	182	121	99	141
14	55	146	0	0	0	0	0	117	193	100	58	134
15	55	146	0	0	0	49	0	127	200	100	58	131
16	17	146	0	0	0	96	0	135	199	90	58	131
17	0	146	0	0	0	96	0	357	192	83	58	125
18	0	146	0	0	0	97	0	475	158	83	58	121
19	0	146	0	0	0	97	32	364	157	83	58	113
20	34	145	0	0	0	97	65	309	154	83	57	110
21	81	143	0	0	0	98	66	238	147	83	63	111
22	79	143	0	0	0	54	66	161	142	84	68	110
23	77	143	0	0	0	0	66	281	148	83	67	110
24	72	143	0	0	0	0	29	370	152	84	67	106
25	73	143	0	0	0	0	16	368	151	84	69	99
26	74	143	0	0	0	0	26	252	151	83	72	96
27	75	113	0	0	0	0	26	182	156	83	104	217
28	75	30	0	0	0	0	26	181	162	84	133	314
29	75	0	0	0		0	26	168	163	84	136	314
30	75	0	0	0		0	26	158	162	84	136	241
31	54		0	0		0		158		155	142	
TOTAL	1965	4691	0	0	0	684	470	4987	4976	3680	3590	4360
MEAN	63.4	156	0	0	0	22.1	15.7	161	166	119	116	145
AC-FT	3900	9300	0	0	0	1360	932	9890	9870	7300	7120	8650
MAX	98	258	0	0	0	98	66	475	200	168	194	314
MIN	0	0	0	0	0	0	0	26	142	83	57	96
CAL YR	2006	TOTAL	30690 MEAN		84.1 MAX	258	MIN	0	AC-FT	60870		
WTR YR	2007	TOTAL	29403 MEAN		80.6 MAX	475	MIN	0	AC-FT	58320		

MAX DISCH: 484 CFS AT 06:45 ON May. 18, 2007 GH 4.05 FT. SHIFT 0.26 FT. MAX GH: 4.05 FT. AT 06:45 ON May. 18, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## LONE PINE CANAL BELOW GREAT CUT DIKE NEAR DOLORES CO WY2007 HYDROGRAPH



### DOLORES RIVER BASIN

### DOLORES RIVER BELOW MCPHEE RESERVOIR NEAR DOLORES, CO

LOCATION.--Lat 37°34'33", long 108°34'33", in SE4SE4 sec. 2, T.38 N., R.16 W., NMPM, Montezuma County.

DRAINAGE AREA. -- 550 mi<sup>2</sup>.

GAGE.--Graphic water-stage recorder and a Sutron Satlink HDR DCP on separate floats in a concrete shelter and well. Control is an 15-ft. Parshall Flume set in a flat concrete structure that acts as a weir at high flows. Electric tape gage is primary reference gage with supplemental outside staff gage in the flume. Datum of gauge is 6,630 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records are complete and reliable. Record good. Diversions for irrigation of up to 47,000 acres upstream of gage in the Dolores River basin and diversions for irrigation of up to 4700 acres in the San Juan River Basin. Flow regulated by McPhee Reservoir, capacity 381,000 acre-feet. Station maintained and record developed by Brian Boughton.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

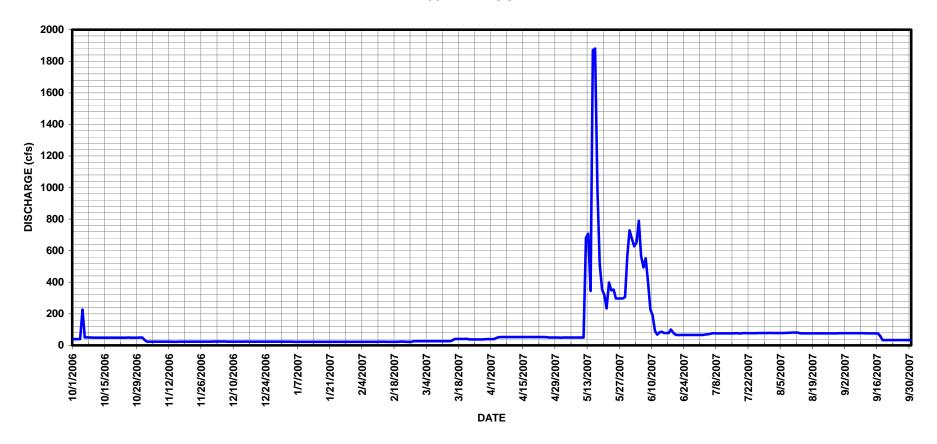
RATING TABLE. -- DOLBMCCO04A USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	40	33	24	23	22	26	40	49	674	66	78	77	
2	40	23	24	23	22	26	40	50	627	66	78	77	
3	40	23	24	23	22	26	47	50	654	69	78	77	
4	40	23	24	23	22	26	52	50	789	70	78	77	
5	227	23	24	22	22	26	53	50	567	73	78	77	
6	50	23	24	22	22	26	53	50	494	77	78	77	
7	51	23	23	22	22	26	53	50	551	76	79	77	
8	50	23	23	22	22	26	53	50	394	76	79	77	
9	50	23	23	22	22	26	53	50	228	76	80	77	
10	49	23	23	22	22	26	53	50	191	76	81	77	
11	49	23	23	22	23	26	53	50	91	76	81	76	
12	49	23	23	22	22	26	53	681	68	76	81	76	
13	49	22	23	22	23	26	53	708	83	76	77	76	
14	49	22	23	22	22	26	53	345	86	76	76	76	
15	49	22	24	22	22	32	53	1870	78	76	76	76	
16	49	23	23	22	22	41	53	1880	78	77	76	76	
17	49	23	23	22	22	41	53	977	78	77	76	59	
18	49	23	23	22	22	41	53	514	100	75	76	33	
19	49	23	23	22	22	41	53	353	79	77	76	33	
20	49	23	23	22	23	41	53	320	68	78	76	33	
21	49	23	23	22	24	42	53	234	65	77	76	33	
22	49	23	23	22	23	39	53	398	66	77	76	33	
23	49	23	23		22	37	53	349	66	77	76	33	
24	49	23	23	22	22	38	53	354	66	77	76	33	
25	50	23	23	22	22	38	52	297	66	77	76	33	
26	49	23	23	22	26	38	50	297	66	78	76	33	
27	49	23	23	22	26	37	50	297	66	78	76	33	
28	49	23	23	22	26	38	50	297	66	78	76	33	
29	49	23	23			39	50	306	66	78	76	33	
30	50	23	23	22		40	50	568	66	78	77	33	
31	50		23	22		40		729		79	77		
TOTAL	1669	697	720	686	634	1027	1541	12323	6637	2343	2396	1714	
MEAN	53.8	23.2	23.2	22.1	22.6	33.1	51.4	398	221	75.6	77.3	57.1	
AC-FT	3310	1380	1430	1360	1260	2040	3060	24440	13160	4650	4750	3400	
MAX	227	33	24	23	26	42	53	1880	789	79	81	77	
MIN	40	22	23	22	22	26	40	49	65	66	76	33	
CAL YR	2006	TOTAL	16043	MEAN	44.0 MAX	227	MIN	21	AC-FT	31820			
WTR YR	2007	TOTAL	32387	MEAN	88.7 MAX	1880	MIN	22	AC-FT	64240			

MAX DISCH: 2280 CFS AT 23:30 ON May. 15, 2007 GH 5.71 FT. SHIFT -0.09 FT. MAX GH: 5.71 FT. AT 23:30 ON May. 15, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## DOLORES RIVER BELOW MCPHEE RESERVOIR NEAR DOLORES CO WY2007 HYDROGRAPH



## BLANCO DIVERSION NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°12′13″, long 106°48′35″, in NW4NE4 sec. 11, T.34 N., R.1 E., NMPM, Archuleta County.

DRAINAGE AREA. --N/A

GAGE.--Graphic water-stage recorder with a Sutron Satlink 2 HDR DCP on separate floats in a concrete shelter and well at a 12-foot Parshall Flume.

REMARKS.--Records are complete and reliable. Record good. Station maintained by the USBR and record developed by Brian Boughton and Cheston Hart.

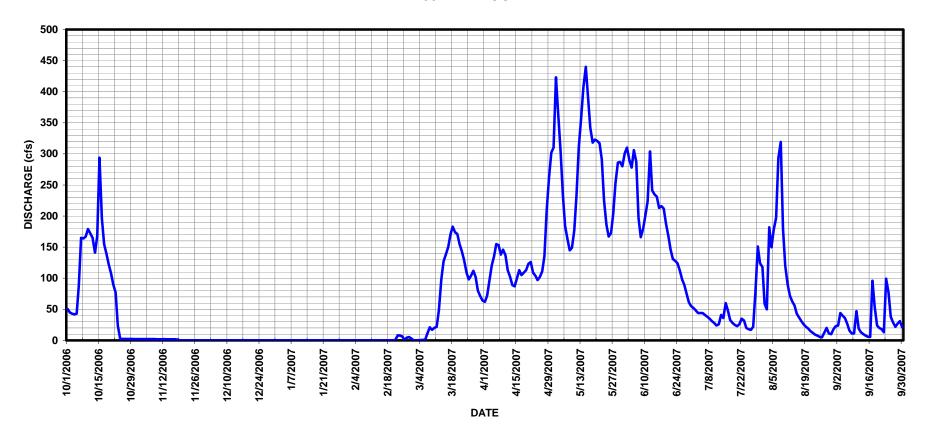
RATING TABLE. -- BLADIVCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE,	IN CFS		YEAR OCTOBE	ER 2006	TO SEPTEMBE	R 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	2.0	0	0	0	.11	62	310	301	52	59	23
2	45	2.0	0	0	0	.36	72	423	310	48	50	24
3	43	2.0	0	0	0	.23	96	364	291	44	182	44
4	42	2.0	0	0	0	.64	121	304	278	44	150	40
5	43	2.0	0	0	0	.80	135	235	306	44	178	36
6	89	2.0	0	0	0	1.0	155	184	287	41	197	27
7	165	2.0	0	0	0	11	153	163	197	38	293	16
8	164	2.0	0	0	0	21	138	145	166	35	319	11
9	167	1.9	0	0	0	17	146	149	180	31	180	11
10	179	1.9	0	0	0	20	137	177	201	28	120	47
11	172	1.9	0	0	0	22	113	234	224	24	90	19
12	165	2.0	0	0	0	49	102	310	304	26	72	13
13	141	1.9	0	0	0	98	89	358	241	41	63	10
14	168	1.9	0	0	0	127	87	407	235	36	56	7.7
15	294	1.8	0	0	0	138	100	440	231	60	43	6.0
16	196	1.9	0	0	0	150	113	391	213	48	37	5.6
17	155	1.9	0	0	0	170	105	342	216	33	31	96
18	140	1.2	0	0	0	183	109	318	212	28	26	54
19	122	0	0	0	0	174	113	323	188	25	22	24
20	108	0	0	0	0	171	123	321	168	23	19	20
21	90	0	0	0	.80	155	126	317	146	26	15	18
22	77	0	0	0	7.9	143	109	291	131	35	12	13
23	24	0	0	0	7.7	129	104	225	128	32	9.3	99
24	2.4	0	0	0	6.5	109	97	186	124	20	7.7	77
25	2.3	0	0	0	.92	98	102	167	113	18	5.6	38
26	2.2	0	0	0	4.4	104	111	173	98	17	5.0	29
27	2.2	0	0	0	5.3	112	136	204	89	22	12	22
28	2.2	0	0	0	2.8	102	209	253	74	77	20	27
29	2.2	0	0	0		80	263	286	61	151	11	31
30	2.1	0	0	0		71	302	287	55	124	10	21
31	2.1		0	0		64		280		118	18	
TOTAL	2857.7	34.3	0	0	36.32	2521.14	3828	8567	5768	1389	2312.6	909.3
MEAN	92.2	1.14	0	0	1.30	81.3	128	276	192	44.8	74.6	30.3
AC-FT	5670	68	0	0	72	5000	7590		11440	2760	4590	1800
MAX	294	2.0	0	0	7.9	183	302	440	310	151	319	99
MIN	2.1	0	0	0	0	.11	62	145	55	17	5.0	5.6
CAL YR WTR YR	2006 2007		880.48 MEAN 223.36 MEAN		1.5 MA 7.3 MA		MIN MIN	0 AC 0 AC		39430 55980		

MAX DISCH: 596 CFS AT 17:00 ON Aug. 7, 2007 GH 4.91 FT. SHIFT 0 FT. MAX GH: 4.91 FT. AT 17:00 ON Aug. 7, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## BLANCO DIVERSION NEAR PAGOSA SPRINGS CO WY2007 HYDROGRAPH



09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°12'13", long 106°48'42", in NW4 sec. ll, T.34 N., R.1 E., NMPM, Archuleta County, Hydrologic Unit 14080101, on left bank 250 ft downstream from Blanco Diversion Dam, 1.1 mi downstream from Leche Creek, and 12 mi southeast of Pagosa Springs.

DRAINAGE AREA AND PERIOD OF RECORD. -- 69.1 mi2. March 1971 to current year.

GAGE.--Graphic water-stage recorder with a Sutron Satlink 2 HDR DCP and shaft encoder on separate floats in a concrete shelter and well. Control is an 4-ft. Parshall flume set in a flat wide concrete structure that acts as a weir at high flows. Electric drop tape is the primary reference gage with a supplemental outside staff gage. The DCP is the primary record. Datum of gage is 7,858.04 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Bureau of Reclamation).

REMARKS.--Record from the DCP is complete. Any data missing from the initial satellite transmissions was filled in from the DCP's logger files. Movement of the shaft encoder float is restricted above 4.43 ft. Chart record data are used when gage height exceeds 4.43 ft without loss of accuracy. The record is reliable, except for the following periods when the stage-discharge relationship was affected by ice: Nov. 30, Dec. 1-16, 21-27 and 31, 2006; Jan. 1-4, 6-19, and 21-31, Feb. 1-9, 15-18, Mar 2-7, 2007. Record good, except for estimated daily discharges, which are poor. Oct. 7, 2006; May 14; Aug. 3, 4, 7, 2007, and the instantaneous peak flow should be considered poor as well since the average daily flows and the peak exceeded the highest measured flow this year by 200%. Station maintained and record developed by Cheston

RATING TABLE.--RIOBLACO06 USED FROM 01-OCT-2006 TO 30-SEP-2007

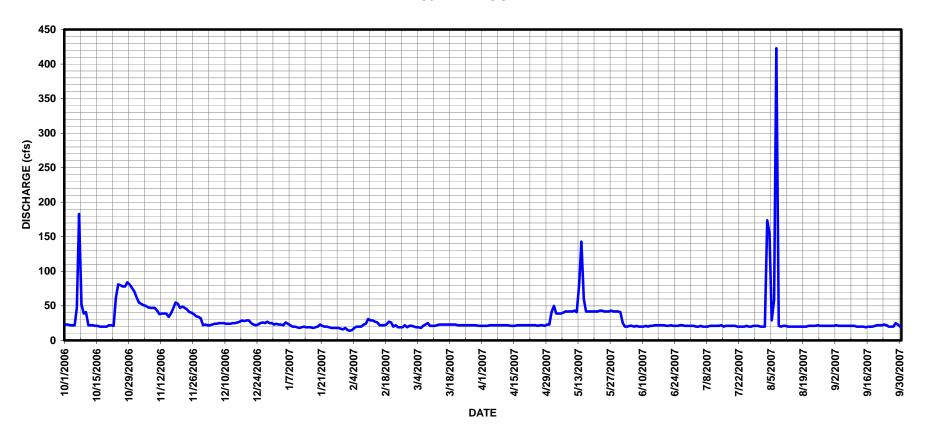
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	63	23e	24e	15e	21	21	41	25	21	20	21
2	23	55	22e	23e	14e	20e	21	50	20	21	20	22
3	22	53	22e	23e	15e	19e	21	39	20	20	174	21
4	22	51	23e	22e	18e	19e	22	39	21	20	155	21
5	22	50	24e	26	20e	18e	22	39	21	21	29	21
6	47	48	24e	24e	20e	21e	22	40	20	20	59	21
7	183	47	25e	22e	20e	23e	22	42	21	20	423	21
8	52	47	25e	20e	23e	25	22	42	20	20	21	21
9	39	47	25e	20e	24e	21	22	42	20	21	20	21
10	41	43	24e	19e	31	21	22	42	20	21	21	21
11	22	38	24e	18e	29	21	22	43	21	21	21	20
12	22	39	24e	19e	29	22	22	41	20	21	20	20
13	22	39	25e	20e	27	23	21	81	21	21	20	20
14	21	39	25e	19e	26	23	21	143	21	22	20	20
15	21	34	26e	19e	22e	23	21	60	22	20	20	19
16	20	39	27e	19e	22e	23	22	42	22	21	20	20
17	20	46	29	18e	22e	23	22	42	22	21	20	20
18	20	55	28	19e	23e	23	22	42	22	21	20	20
19	20	53	29	20e	27	23	22	42	22	21	20	21
20	22	47	29	23	26	23	22	42	21	21	20	22
21	22	49	25e	21e	20	22	22	42	21	20	21	22
22	21	47	23e	20e	22	22	22	43	22	20	21	22
23	61	45	22e	20e	19	22	22	43	21	20	21	23
24	81	41	23e	19e	19	22	22	42	21	20	21	22
25	80	40	25e	18e	19	22	21	42	21	21	22	20
26	78	38	26e	18e	22	22	22	42	22	20	21	20
27	78	35	25e	18e	19	22	22	43	22	20	21	20
28	84	34	27	18e	21	22	21	42	21	21	21	25
29	81	32	25	17e		22	23	42	21	21	21	23
30	76	22e	25	16e		21	23	42	21	21	21	20
31	71		23e	18e		21		41		20	21	
TOTAL	1417	1316	772	620	614	675	654	1458	635	639	1375	630
MEAN	45.7	43.9	24.9	20.0	21.9	21.8	21.8	47.0	21.2	20.6	44.4	21.0
AC-FT	2810	2610	1530	1230	1220	1340	1300	2890	1260	1270	2730	1250
MAX	183	63	29	26	31	25	23	143	25	22	423	25
MIN	20	22	22	16	14	18	21	39	20	20	20	19
CAL YR	2006	TOTAL	9627 ME		26.4 MAX	183		12		19100		
WTR YR	2007	TOTAL	10805 ME	AN	29.6 MAX	423	MIN	14	AC-FT	21430		

MAX DISCH: 2380 CFS AT 17:45 ON Aug. 3, 2007 GH 4.93 FT. SHIFT 0 FT. MAX GH: 4.93 FT. AT 17:45 ON Aug. 3, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

# 09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM NEAR PAGOSA SPRINGS CO WY2007 HYDROGRAPH



## RIO BLANCO AT MOUTH NEAR TRUJILLO, CO

LOCATION.--Lat 37°07'40", long 107°02'03", in SW4SE14 sec. 2, T.33 N., R.2 W., NMPM, Archuleta County.

DRAINAGE AREA. -- 170 mi<sup>2</sup>.

GAGE.--Graphic water-stage recorder and a Sutron SatLink 2 HDR DCP with shaft encoder on separate floats in a 42 inch CMP shelter and well. The primary reference gage is a steel drop tape referenced to an adjustable reference point on the instrument shelf. A new 48" corrugated well was installed on September 18, 2007 approximately 40-ft. downstream of the existing gage. A new wooden shelter was installed in October 2007. Datum of gauge is 6640 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Record is complete and reliable except for the following periods: Dec. 4-31, 2006; Jan. 1-31; Feb. 1-28; Mar. 1-13, 2007, when the stage-discharge relationship was affected by ice; Aug. 8-19, 2007, when the inlets were plugged; and, Sep. 13-18, 2007, when a stream restoration project changed the control. Record fair, except for those periods of ice affect, plugged inlets, and installation of boulders below the gage. These should be considered poor. Station maintained by Val Valentine and Cheston Hart. Record developed by Brian Boughton.

RATING TABLE. -- RIOMOUCO03 USED FROM 01-OCT-2006 TO 30-SEP-2007

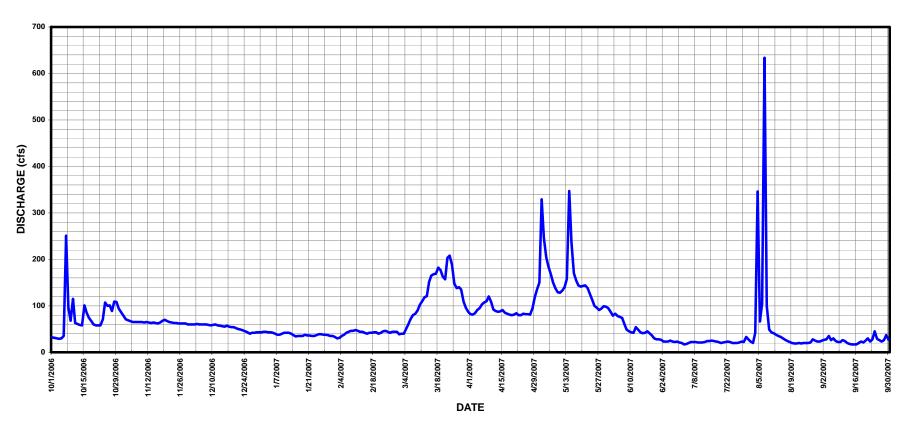
DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	79	60	44e	33e	39e	82	150	87	21	23	25
2	31	71	60	44e	30e	40e	81	329	79	20	20	27
3	30	69	61	43e	31e	40e	84	246	83	17	42	28
4	29	67	60e	43e	35e	50e	91	204	78	18	346	35
5	30	65	60e	42e	38e	60e	95	184	76	20	66	26
6	35	65	60e	40e		72e	103	168	74	22	105	30
7	251	65	60e	38e		80e	107	150	61	22	634	24
8	97	65	59e	38e		83e	110	138	49	22	100	22
9	68	65	58e	40e	46e	90e	120	129	45	21	49	22
10	115	64	59e	42e	48e	102e	108	128	43	21	43	26
11	63	65	60e	42e	46e	110e	92	133	42	21	41	24
12	61	64	58e	42e	44e	118e	89	140	54	22	38	20
13	59	63	57e	40e	44e	121e	87	158	49	24	35	18
14	58	64	56e	37e	42e	151	88	347	43	24	33	17
15	101	63	55e	34e	40e	165	91	236	41	25	30	17
16	85	62	57e	35e	42e	168	85	170	42	24	27	17
17	74	64	55e	35e	42e	169	83	155	45	23	24	20
18	67	68	54e	35e	43e	182	81	144	41	22	22	23
19	60	70	54e	38e	43e	177	80	141	36	20	20	21
20	58	67	52e	36e	40e	163	81	143	30	21	19	25
21	58	65	50e	36e		157	84	144	28	22	19	30
22	58	64	49e	35e		203	80	138	28	23	20	23
23	71	63	47e	35e		208	80	126	27	22	19	28
24	107	63	45e	37e		188	83	113	23	20	20	45
25	100	62	43e	39e		148	82	100	23	20	20	29
26	101	62	40e	39e		138	82	96	23	20	20	26
27	89	62	42e	38e	44e	140	81	91	25	21	21	23
28	109	62	42e	38e	44e	135	95	94	23	23	28	26
29	108	60	43e	37e		109	118	99	22	22	25	37
30	94	60	43e	35e		96	135	98	23	33	23	27
31	86		43e	35e		87		95		28	23	
TOTAL	2385	1948	1642	1192	1170	3789	2758	4787	1343	684	1955	761
MEAN	76.9	64.9	53.0	38.5	41.8	122	91.9	154	44.8	22.1	63.1	25.4
AC-FT	4730	3860	3260	2360	2320	7520	5470	9500	2660	1360	3880	1510
MAX	251	79	61	44	48	208	135	347	87	33	634	45
MIN	29	60	40	34	30	39	80	91	22	17	19	17
CAL YR	2006	TOTAL	14746 ME	AN	40.4 MAX	251	MIN	16	AC-FT	29250		
WTR YR	2007	TOTAL		AN	66.9 MAX	634			AC-FT	48430		
	_00.	- 0				551		- '		10100		

MAX DISCH: 2320 CFS AT 08:00 ON Aug. 7, 2007 GH 5.12 FT. SHIFT -0.16 FT. MAX GH: 5.12 FT. AT 08:00 ON Aug. 7, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

## RIO BLANCO AT MOUTH NEAR TRUJILLO CO WY2007 HYDROGRAPH



## 09344000 NAVAJO RIVER AT BANDED PEAK RANCH, NEAR CHROMO, CO

LOCATION.--Lat 37°05'07", long 106°41'20", in SE4NW4 sec. 24, T.33 N., R.2 E., NMPM, Archuleta County, Hydrologic Unit 14080101, on right bank at downstream side of private bridge on Banded Peak Ranch, 0.5 mi downstream from Cutthroat Creek, 2.8 mi downstream from East Fork of the Navajo River, and 11.2 mi northeast of Chromo, Co.

DRAINAGE AREA. -- 69.8 mi<sup>2</sup>.

GAGE.--Graphic water stage-recorder and a Sutron SatLink 2 HDR DCP in a 48-inch wood shelter and well. The primary reference gage is a drop tape in the well. An air temperature sensor was installed on November 2, 2006. A Sutron AccuBubbler was installed on July 30, 2007 for reference purposes when the intakes get clogged. Datum of gage is 7,939.3 ft above National Geodetic Vertical Datum of 1929 (river-profile survey).

REMARKS.--Record is complete. It is reliable, except for the following periods: Oct. 9-11 2006; Mar. 19-22; Apr. 30; May 1, 13-16, 2007, when the inlets were plugged; Dec. 1-5, 8, 9, 13, 21-26, 31 2006; Jan. 1-4, 6-10, 15-19, 22-30; Feb. 1-6, 15-18, 21-25; Mar. 1-6, 2007, when the stage-discharge relationship was affected by ice; and, Aug. 20-23, 2007, when firmware in the Satlink 2 was upgraded and caused the shaft encoder to reverse. Record fair, except for the days on which ice affected the stage-discharge relationship and sand and gravel plugged the inlets, which should be considered poor. Station maintained and record developed by Cheston Hart.

RATING TABLE. -- NAVBANCO23 USED FROM 01-OCT-2006 TO 30-SEP-2007

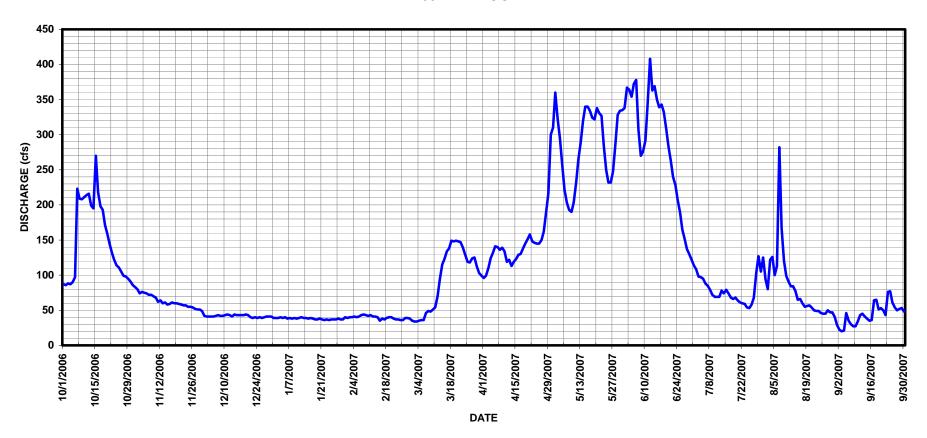
DISCHARGE,	ΙN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007	
			N.	MEAN V	JALUES					

1 87 83 42e 39e 39e 35e 96 310e 338 114 94	29 22
2 86 80 41e 39e 40e 34e 99 360 367 108 80	
3 88 74 41e 40e 40e 34e 110 322 364 98 122	20
4 87 76 41e 39e 41e 35e 124 295 354 97 126	21
5 90 75 41e 40 40e 36e 132 257 372 95 100	46
6 97 74 42 38e 41e 36e 141 222 378 88 113	35
7 223 72 43 39e 43 46 140 203 308 85 282	30
8 209 72 42e 38e 44 49 136 193 270 79 167	27
9 208e 70 42e 39e 43 48 139 190 276 72 120	27
10 211e 68 43 38e 42 51 134 204 292 69 99	34
11 214e 62 44 39 43 54 119 232 345 69 91	43
12 216 64 43 40 41 70 122 265 408 69 84	45
13 199 60 41e 39 41 94 113 290e 363 78 84	41
14 195 61 44 39 40 115 119 320e 369 74 77	38
15 270 58 43 38e 35e 123 123 340e 350 79 65	35
16 218 59 43 39e 38e 134 129 340e 339 74 66	36
17 198 61 43 38e 37e 138 130 334 343 68 60	64
18 193 60 43 37e 39e 149 138 324 332 66 55	65
19 171 60 44 37e 40 148e 145 322 308 68 56	51
20 159 59 43 38 40 149e 151 338 284 64 57	53
21 144 58 40e 37 38e 148e 158 331 263 61 54	50
22 132 57 39e 36e 37e 147e 148 327 240 60 50	43
23 122 57 40e 37e 139 146 285 228 59 49	76 77
24 114 55 39e 36e 36e 129 145 250 207 54 49 25 111 55 40e 37e 36e 119 145 232 189 53 46	61
25 111 55 40e 37e 36e 119 145 232 189 53 46 26 105 54 39e 37e 39 118 150 232 165 58 45	54
26 105 54 396 376 39 118 150 232 165 58 45 27 99 52 40 37e 39 124 162 248 151 68 45	54 50
28 98 51 41 38e 38 125 190 287 137 103 50	52
29 95 51 41 37e 112 217 328 130 127 47	53
30 91 49 41 37e 103 300e 334 122 105 47	48
31 86 39e 40 99 335 125 40	
31 00 396 40 39 333 123 40	
TOTAL 4616 1887 1288 1182 1107 2941 4301 8850 8592 2487 2520	1326
MEAN 149 62.9 41.5 38.1 39.5 94.9 143 285 286 80.2 81.3	44.2
AC-FT 9160 3740 2550 2340 2200 5830 8530 17550 17040 4930 5000	2630
MAX 270 83 44 40 44 149 300 360 408 127 282	77
MIN 86 49 39 36 35 34 96 190 122 53 40	20
CAL YR 2006 TOTAL 34251 MEAN 93.8 MAX 417 MIN 33 AC-FT 67940	
WTR YR 2007 TOTAL 41097 MEAN 113 MAX 408 MIN 20 AC-FT 81520	

MAX DISCH: 529 CFS AT 02:00 ON Aug. 7, 2007 GH 3.60 FT. SHIFT -0.24 FT. MAX GH: 3.60 FT. AT 02:00 ON Aug. 7, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

## 09344000 NAVAJO RIVER AT BANDED PEAK RANCH NEAR CHROMO CO WY2007 HYDROGRAPH



## OSO DIVERSION NEAR CHROMO, CO

LOCATION.--Lat 37°01'49", long 106°44'14", in NE4NE4 sec. 9, T.32 N., R.2 E., NMPM, Archuleta County.

DRAINAGE AREA. --N/A

CAL YR 2006 WTR YR 2007

GAGE.--Graphic water-stage recorder and a Sutron Satlink 2 HDR DCP on separate floats in a concrete shelter and well at a 15-foot Parshall Flume.

REMARKS.--Records are complete and reliable. Record good. Station maintained by the USBR and record developed by Brian Boughton and Cheston Hart.

RATING TABLE. -- OSODIVCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE,	IN CFS,		YEAR OCTOBER	2006	TO SEPTEMBER	2007			
						MEAN VALUES						
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	0	0	0	0	.37	92	214	304	50	67	0
2	43	0	0	0	0	0	96	344	339	43	33	0
3	52	0	0	0	0	0	108	286	334	35	84	0
4	57	0	0	0	0	.38	131	253	316	37	103	0
5	56	0	0	0	0	1.0	147	209	338	36	78	4.6
6	67	0	0	0	0	4.4	161	166	357	29	81	.55
7	282	0	0	0	0	5.7	165	138	262	24	248	0
8	210	0	0	0	.32	17	167	123	206	21	128	0
9	207	0	0	0	.29	19	168	115	200	14	64	0
10	241	0	0	0	0	25	153	131	213	11	51	0
11	196	0	0	0	0	31	125	168	263	10	36	0
12	178	0	0	0	0	56	121	209	346	11	33	0
13	166	0	0	0	0	98	113	258	299	16	27	.41
14	164	0	0	0	0	139	114	320	305	12	31	.82
15	280	0	0	0	.82	165	122	347	291	15	15	.82
16	215	0	0	0	.82	181	124	319	281	18	11	.82
17	186	0	0	0	.85	201	124	287	280	13	12	.82
18	165	0	0	0	1.0	227	125	266	288	12	9.1	.82
19	139	0	0	0	1.3	225	131	268	247	8.3	8.0	.82
20	129	0	0	0	11	217	135	286	215	8.4	7.3	.38
21	115	0	0	0	7.1	202	143	283	193	11	3.5	0
22	97	0	0	0	8.4	213	129	274	168	10	.92	0
23	29	0	0	0	8.8	210	123	223	161	9.1	.75	0
24	.73	0	0	0	8.4	177	127	180	141	3.7	.82	0
25	.64	0	0	0	1.3	148	123	152	126	3.2	.82	0
26	.64	0	0	0	7.9	145	127	146	105	4.5	.82	0
27	.64	0	0	0	8.1	153	132	163	90	14	.82	0
28	.72	0	0	0	4.6	146	166	207	74	41	.82	0
29	.82	0	0	0		114	214	251	67	90	.82	0
30	.37	0	0	0		104	237	265	59	72	.41	0
31	0		0	0		98		265		95	0	
TOTAL	3315.56	0	0	0	71.00	3322.85	4143	7116	6868	777.2	1136.90	10.86
MEAN	107	0	0	0	2.54	107	138	230	229	25.1	36.7	.36
AC-FT	6580	0	0	0	141	6590	8220	14110 1	3620	1540	2260	22
MAX	282	0	0	0	11	227	237	347	357	95	248	4.6
MIN	0	0	0	0	0	0	92	115	59	3.2	0	0

MAX DISCH: 525 CFS AT 06:45 ON Aug. 7, 2007 GH 3.97 FT. SHIFT 0 FT. MAX GH: 3.97 FT. AT 06:45 ON Aug. 7, 2007

48.3 MAX 73.3 MAX

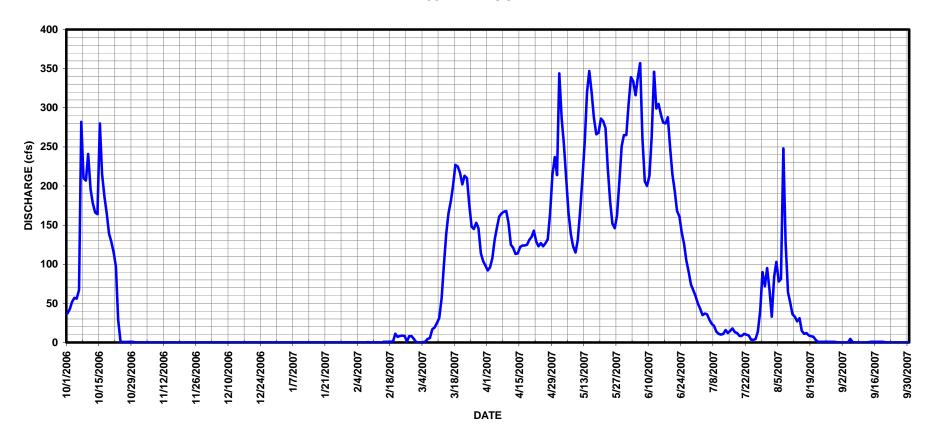
FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

TOTAL 17627.65 MEAN TOTAL 26761.37 MEAN

308 MIN 357 MIN 0 AC-FT 0 AC-FT

34960 53080

## OSO DIVERSION NEAR CHROMO CO WY2007 HYDROGRAPH



## 09344400 NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°01'49", long 106°44'14", in NE4NW4 sec. 9, T.32 N., R.2 E., NMPM, Archuleta County, Hydrologic Unit 14080101, on left bank 600 ft downstream from Oso Diversion Dam, 5.8 mi east of Chromo, and 6.1 mi upstream from Little Navajo River.

DRAINAGE AREA AND PERIOD OF RECORD.--100.5 mi<sup>2</sup>. March 1971 to current year.

GAGE.--Graphic water-stage recorder with a Sutron SatLink 2 HDR DCP and shaft encoder on separate floats in a concrete shelter and well. Control is an 8-ft. Parshall flume set in a flat wide concrete structure that acts as a weir at high flows. The primary reference gage is an electric drop tape in the gage shelter. The Parshall flume is equipped with a supplemental outside gage. The DCP is the primary record. Datum of gage is 7,665.30 ft above mean sea level.

REMARKS.--Record from the DCP is complete, any data missing from the initial satellite transmissions were filled in from the DCP's logger files. The record is reliable, except for the following periods: Nov. 30, Dec 1-6, 12-14, 22-28, 2006; Jan 6-12, 15-22; March 1-4, 2007, when the stage-discharge relationship was affected by ice; and, Jan 23-31; Feb 1-15, 2007, when large amount of sand deposits below the flume submerged the flume. Record good, except for those periods when ice affected the record, or, when sand deposits below the flume caused submergence, which are poor. Station maintained and record developed by Cheston Hart.

RATING TABLE. -- NAVOSOCO04 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE,	ΙN	CFS,	WATER	YEAR	OCTOBER	2006	ΤO	SEPTEMBER	2007
			I	MEAN V	/ALUES				

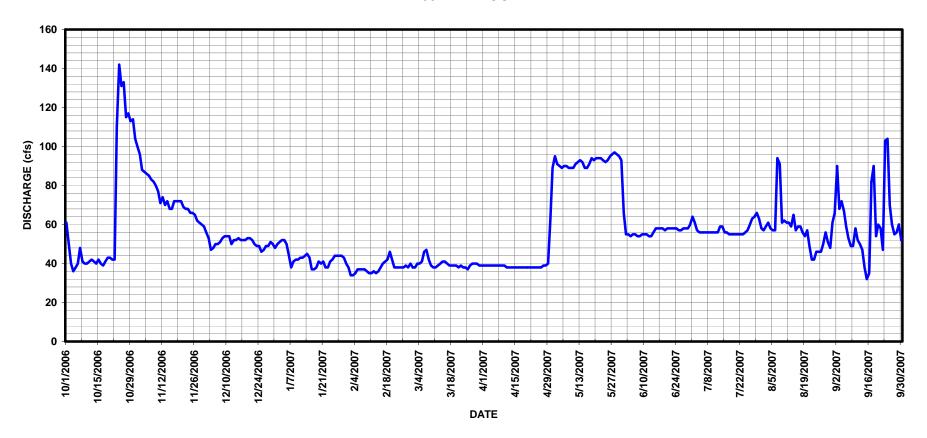
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	100	566	e 50	38e	38e	39	89	66	64	57	66
2	50	96	53€		34e	38e	39	95	55	61	59	90
3	40	88	47€		34e	40e	39	91	55	57	61	68
4	36	87	486		35e	40e	39	90	54	56	58	72
5	38	86	50€		37e	41	39	89	55	56	57	67
6	40	85	50€			46	39	90	55	56	57	59
7	48	83	51			47	39	90	54	56	94	53
8	41	82	53	41e		42	39	89	54	56	91	49
9	40	80	54	42e		39	39	89	55	56	61	49
10	40	77	54	42e	35e	38	39	89	55	56	62	58
11	41	71	54	43e	35e	38	38	91	55	56	61	52
12	42	74	50€	e 43e	36e	39	38	92	54	56	61	50
13	41	70	52€	9 44	35e	40	38	93	54	59	59	47
14	40	72	52€	45	36e	41	38	92	56	59	65	38
15	42	68	53	43e	38e	41	38	89	58	56	57	32
16	40	68	52	37e	40	40	38	89	58	56	59	35
17	39	72	52	37e	41	39	38	91	58	55	59	82
18	41	72	52	38e	42	39	38	94	58	55	56	90
19	43	72	53	41e	46	39	38	93	57	55	54	54
20	43	72	53	40e	42	39	38	94	58	55	57	60
21	42	69	52	41e	38	38	38	94	58	55	49	58
22	42	68	50€	e 38e	38	39	38	94	58	55	42	47
23	110	68	49€	e 38e	38	38	38	93	58	55	42	103
24	142	66	49€	e 41e	38	38	38	92	58	56	46	104
25	131	66	46€	e 42e	38	37	38	93	57	57	46	70
26	133	65	47€	e 44e	39	39	38	95	57	60	46	60
27	115	62	49€	e 44e	38	40	39	96	58	63	50	55
28	117	61	49€	e 44e	40	40	39	97	58	64	56	56
29	113	60	51	44e		40	40	96	58	66	51	60
30	114	59e	50	43e		39	62	95	60	63	48	52
31	104		48	40e		39		93		58	61	
TOTAL	2009	2219	1579	1332	1058	1231	1178	2857	1704	1788	1782	1836
MEAN	64.8	74.0	50.9	43.0	37.8	39.7	39.3	92.2	56.8	57.7	57.5	61.2
AC-FT	3980	4400	3130	2640	2100	2440	2340	5670	3380	3550	3530	3640
MAX	142	100	56	52	46	47	62	97	66	66	94	104
MIN	36	59	46	37	34	37	38	89	54	55	42	32
CAL YR	2006	TOTAL	19947	MEAN	54.6 MAX	163	3 MIN	27	AC-FT	39560		

WTR YR 2007 TOTAL 20573 MEAN 56.4 MAX 142 MIN 32 AC-FT 40810

MAX DISCH: 460 CFS AT 12:30 ON Sep. 6, 2007 GH 3.67 FT. SHIFT 0.07 FT. MAX GH: 3.67 FT. AT 12:30 ON Sep. 6, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

## 09344400 NAVAJO RIVER BELOW OSO DIVERSION DAM NEAR CHROMO CO WY2007 HYDROGRAPH



## LITTLE OSO DIVERSION NEAR CHROMO, CO

LOCATION.--Lat 37°04'32", long 106°48'38", in SW4SE4 sec. 23, T.33 N., R.1 E., NMPM, Archuleta County.

DRAINAGE AREA.-N/A. March 1971 to current year.

**GAGE.**—-Graphic water-stage recorder with Sutron Satlink 2 HDR DCP on separate floats in a concrete shelter at a 6-foot Parshall Flume. The DCP is the primary record.

REMARKS.--Records are complete and reliable. Record good. Station maintained by the USBR and record developed by Brian Boughton and Cheston Hart.

RATING TABLE. -- LOSODVCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

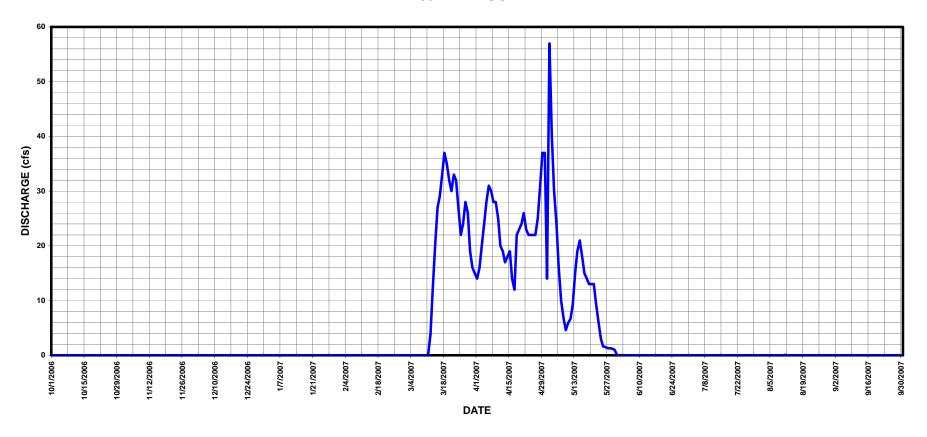
## DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

1 0 0 0 0 0 0 0 14 14 14 0 0 0 0 0 0 0 0	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1	0	0	0	0	0	0	14	1.4	0	0	0	0
3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
4 0 0 0 0 0 0 0 0 0 24 30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0												Ō	
6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0	0	0	0	0	24		0	0	0	0
7	5	0	0	0	0	0	0	28	24	0	0	0	0
8 0 0 0 0 0 0 0 0 0 28 6.8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6	0	0	0	0	0	0	31	16	0	0	0	0
9 0 0 0 0 0 0 0 0 0 0 28 4.6 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1	7	0	0	0	0	0	0	30	10	0	0	0	0
10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8	0	0	0	0	0	0			0	0	0	0
11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9	0	0	0	0	0	0	28		0	0	0	0
12		-	-	0	0	0					-	-	0
13		0	0	0	0	0				0	0	.05	0
14													
15 0 0 0 0 0 0 27 19 21 0 0 0 0 0 0 16 0 16 0 0 0 0 0 0 0 0 0		-	-	-	-						-	-	
16 0 0 0 0 0 0 29 14 18 0 0 0 0 0 0 0 17 0 0 18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				-		-						-	
17					-							-	
18												-	
19 0 0 0 0 0 0 35 23 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-								-	-	
20 0 0 0 0 0 0 0 0 32 24 13 0 0 0 0 0 0 21 0 0 0 0 0 0 0 0 0 0 0 0													
21 0 0 0 0 0 0 0 30 26 13 0 0 0 0 0 0 0 22 22 0 0 0 0 0 0 0 0 0												-	
22 0 0 0 0 0 0 0 33 23 9.4 0 0 0 0 0 0 0 23 0 0 0 0 0 0 0 0 0 0 0					-	-						-	
23 0 0 0 0 0 0 32 22 6.1 0 0 0 0 0 0 24 22 3.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		-	-		-	-					-	-	
24 0 0 0 0 0 0 27 22 3.0 0 0 0 0 0 0 25 0 0 0 0 0 0 0 0 0 0 0 0			-		-	-						-	
25 0 0 0 0 0 0 22 22 1.6 0 0 0 0 0 0 26 27 22 1.5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-	-	-	-					-	-	-
26 0 0 0 0 0 0 24 22 1.5 0 0 0 0 0 0 27 0 0 0 0 0 0 0 0 0 0 0 0			-	-	-	-					-	-	-
27  0  0  0  0  0  28  25  1.3  0  0  0  0  0  28  25  1.3  0  0  0  0  0  0  28  28  25  1.3  0  0  0  0  0  0  0  0  0  0  0  0  0		-	-	-	-	-					-	-	-
28  0  0  0  0  0  26  31  1.3  0  0  0  0  0  29  29  0  0  0  0  0  0  0  0  0  0  0  0  0													
29 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					-	-						-	
30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-	-	-							-	-
31 0 0 0 15 0 0 0  TOTAL 0 0 0 0 0 500.8 699 391.57 0 0 0.05 0  MEAN 0 0 0 0 0 16.2 23.3 12.6 0 0 0.002 0  AC-FT 0 0 0 0 0 0 993 1390 777 0 0 1.1 0  MAX 0 0 0 0 0 0 37 37 57 0 0 0.05 0  MIN 0 0 0 0 0 0 1.2 0 0 0 0 0  CAL YR 2006 TOTAL 548.3 MEAN 1.50 MAX 34 MIN 0 AC-FT 1090													
TOTAL 0 0 0 0 0 500.8 699 391.57 0 0 .05 0 MEAN 0 0 0 0 0 16.2 23.3 12.6 0 0 .002 0 AC-FT 0 0 0 0 0 0 993 1390 777 0 0 .1 0 MAX 0 0 0 0 0 0 37 37 57 0 0 0 .1 0 MIN 0 0 0 0 0 0 0 12 0 0 0 0 0 0 0 0 0 0 0													
MEAN     0     0     0     0     16.2     23.3     12.6     0     0     .002     0       AC-FT     0     0     0     0     993     1390     777     0     0     .1     0       MAX     0     0     0     0     0     37     37     57     0     0     .05     0       MIN     0     0     0     0     0     1.50     MAX     34     MIN     0     AC-FT     1090	31	U		0	U		13		U		O	O	
AC-FT 0 0 0 0 0 993 1390 777 0 0 1 0 0 MAX 0 0 0 0 0 0 37 37 57 0 0 0 .05 0 MIN 0 0 0 0 0 0 0 12 0 0 0 0 0 0 0 0 0 0 0	TOTAL	0	0	0	0	0	500.8	699	391.57	0	0	.05	0
MAX 0 0 0 0 0 0 37 37 57 0 0 .05 0 MIN 0 0 0 0 0 0 12 0 0 0 0 0 0 0 0 0 0 0 0		0	0	0	0	0				0	0		0
MIN 0 0 0 0 0 0 0 12 0 0 0 0 0 0 0 0 0 0 0		0		-	-	0							
CAL YR 2006 TOTAL 548.3 MEAN 1.50 MAX 34 MIN 0 AC-FT 1090													
	MIN	0	0	0	0	0	0	12	0	0	0	0	0

MAX DISCH: 72.5 CFS AT 04:45 ON May. 2, 2007 GH 2.00 FT. SHIFT 0 FT. MAX GH: 2.00 FT. AT 04:45 ON May. 2, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## LITTLE OSO DIVERSION NEAR CHROMO CO WY2007 HYDROGRAPH



09345200 LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM NEAR CHROMO, CO

LOCATION.--Lat 37°04'32", long 106°48'38", in SW4SE4 sec. 23, T.33 N., R.1 E., NMPM, Archuleta County, on right bank downstream from Little Oso Diversion Dam.

DRAINAGE AREA AND PERIOD OF RECORD. -- N/A, December 5, 1996 to current year.

GAGE.--Graphic water stage-recorder and a Sutron SatLink 2 HDR DCP and shaft encoder on separate floats in a wooden shelter and concrete well. The primary reference gage is a drop tape in the gage. Supplemental outside staff gage. Control is a 5-foot Parshall flume set in concrete. The DCP is the primary record.

REMARKS.--The record is complete. Record is reliable, except for the following periods: Dec. 1-10, 2006; Jan. 13; Feb. 2, 3, 6-8, 15-18, 25; Mar. 1-9, 2007 when the stage-discharge relationship was affected by ice; and, Jan. 8-12, 14-22, 2007, when the floats were frozen in the well. Record fair, except for those periods of ice effect or when the well was froze, which are poor. Station maintained by Sherry Schutz and record developed by Cheston Hart.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

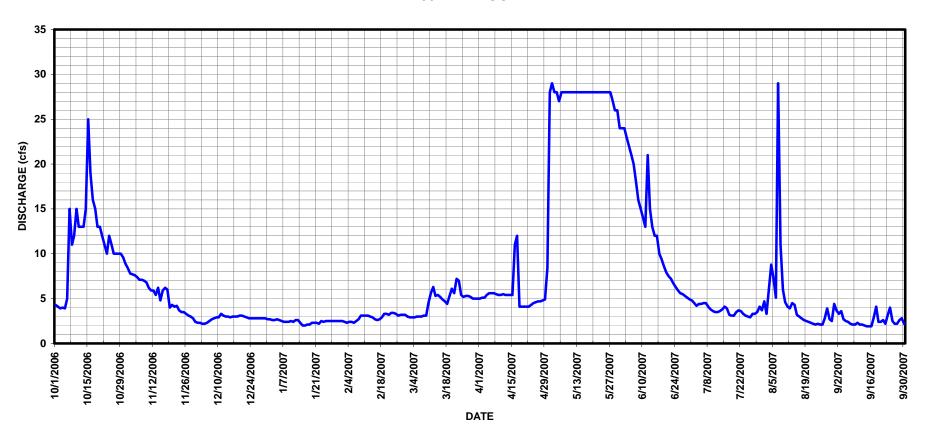
RATING TABLE.--LITOSOCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

	MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	4.3	8.4	2.3	e 2.7	2.5	3.0e	5.0	28	24	4.8	4.7	3.7		
2	4.1	7.8	2.3	2.6	2.4e	2.9e	5.1	29	24	4.5	3.3	3.3		
3	3.9	7.7	2.26		2.3e	2.9e	5.1	28	23	4.2	6.0	3.6		
4	4.0	7.6	2.26	e 2.7	2.4	2.9e	5.4	28	22	4.4	8.8	2.7		
5	3.9	7.4	2.3	2.6	2.4	3.0e	5.6	27	21	4.4	7.3	2.5		
6	5.0	7.1	2.5	2.5	2.3e	3.0e	5.6	28	20	4.5	5.1	2.4		
7	15	7.1	2.7	2.4	2.5e	3.0e	5.6	28	18	4.5	29	2.2		
8	11	7.0	2.86	e 2.4e	2.7e	3.1e	5.5	28	16	4.1	11	2.1		
9	12	6.8	2.9	e 2.4e	3.1	3.1e	5.4	28	15	3.8	6.0	2.1		
10	15	6.2	2.9	e 2.5e	3.1	4.5	5.4	28	14	3.6	4.6	2.3		
11	13	5.9	3.3	2.4e	3.1	5.6	5.5	28	13	3.5	4.1	2.1		
12	13	5.9	3.1	2.6e	3.1	6.3	5.4	28	21	3.5	3.9	2.1		
13	13	5.4	3.0	2.6e	3.0	5.3	5.4	28	15	3.6	4.5	2.0		
14	15	6.2	3.0	2.3e	2.9	5.4	5.4	28	13	3.8	4.3	1.9		
15	25	4.8	2.9	2.0e	2.7e	5.2	5.4	28	12	4.1	3.2	1.9		
16	19	5.9	3.0	2.0e	2.6e	4.9	11	28	12	3.9	3.0	1.9		
17	16	6.2	3.0	2.1e	2.7e	4.7	12	28	10	3.2	2.8	2.9		
18	15	6.0	3.0	2.1e	2.9e	4.4	4.1	28	9.4	3.1	2.6	4.1		
19	13	4.0	3.1	2.3e	3.3	5.3	4.1	28	8.6	3.1	2.5	2.4		
20	13	4.3	3.1	2.3e		6.1	4.1	28	7.9	3.5	2.4	2.4		
21	12	4.1	3.0	2.3e		5.6	4.1	28	7.5	3.7	2.3	2.6		
22	11	4.2	2.9	2.2e	3.4	7.2	4.1	28	7.2	3.6	2.2	2.2		
23	10	3.7	2.8	2.5	3.4	7.0	4.3	28	6.7	3.3	2.1	3.2		
24	12	3.5	2.8	2.4	3.3	5.4	4.5	28	6.3	3.1	2.2	4.0		
25	11	3.5	2.8	2.5	3.1e	5.2	4.6	28	5.9	3.0	2.1	2.5		
26	10	3.3	2.8	2.5	3.2	5.3	4.7	28	5.6	2.9	2.1	2.2		
27	10	3.1	2.8	2.5	3.2	5.3	4.7	28	5.5	3.3	2.8	2.2		
28	10	3.0	2.8	2.5	3.2	5.2	4.8	27	5.3	3.3	3.9	2.6		
29	10	2.8	2.8	2.5		5.0	4.9	26	5.1	3.5	2.7	2.8		
30	9.6	2.4	2.8	2.5		5.0	8.4	26	4.9	4.1	2.5	2.2		
31	8.9		2.7	2.5		5.0		24		3.7	4.4			
TOTAL	347.7	161.3	86.6	75.0	81.3	145.8	165.2	859	378.9	115.6	148.4	77.1		
MEAN	11.2	5.38	2.79	2.42	2.90	4.70	5.51	27.7	12.6	3.73	4.79	2.57		
AC-FT	690	320	172	149	161	289	328	1700	752	229	294	153		
MAX	25	8.4	3.3	2.7	3.4	7.2	12	29	24	4.8	29	4.1		
MIN	3.9	2.4	2.2	2.0	2.3	2.9	4.1	24	4.9	2.9	2.1	1.9		
CAL YR	2006	TOTAL		MEAN	5.24 MAX	3		1.0	AC-FT	3790				
WTR YR	2007	TOTAL	2641.9	MEAN	7.24 MAX	2	9 MIN	1.9	AC-FT	5240				

MAX DISCH: 85.1 CFS AT 01:00 ON Aug. 7, 2007 GH 2.50 FT. SHIFT -0.01 FT. MAX GH: 2.50 FT. AT 01:00 ON Aug. 7, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

# 09345200 LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM NEAR CHROMO CO WY2007 HYDROGRAPH



## 09362750 FLORIDA RIVER ABOVE LEMON RESERVOIR NEAR DURANGO, CO

LOCATION.--Lat 37°25'36", long 107°40'28", in SW4NE4 sec. 31, T.37 N., R.7 W., NMPM, La Plata County.

DRAINAGE AREA.-50.9 mi<sup>2</sup>.

GAGE.--Graphic water stage-recorder and a Sutron Satlink 2 HDR DCP with a shaft encoder on a separate float in a 72-inch by 72-inch exposed aggregate concrete shelter and a 42" corrugated metal pipe well. The floats are located inside of a 14 inch PVC oil cylinder. The DCP record is the primary record with chart record used for backup purposes. The station is also equipped with a Sutron air temperature sensor. The primary reference gage is an electric drop tape with a separate steel drop tape used when the well is frozen around the oil cylinder. The manned cableway was removed and a bank operated cableway was installed on May 3, 2007. On July 25, 2007 the floor grate over the stilling well was installed. Datum of gauge is 8,160 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--The record is complete and reliable, except for the following periods: Oct. 6-7, 2006, when the floats hung up on oil cylinder; Oct. 11-18, 2006, when the well intakes were plugged; Nov. 30; Dec. 1-4, 13-14, 19-25, 31, 2006; Jan. 2-3, 6-10, 15-19, 30-31; Feb. 1-4, 15-18; Mar. 1-4, 2007, when ice on the control affected the gage height; and, Jan. 20-29, 2007, when the well froze. Record good, except for estimated daily discharges, which are poor. Station maintained and record developed by Brian Boughton.

RATING TABLE. -- FLOALECOO7 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE,	ΙN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007	
			N	MEAN V	/ALUES					

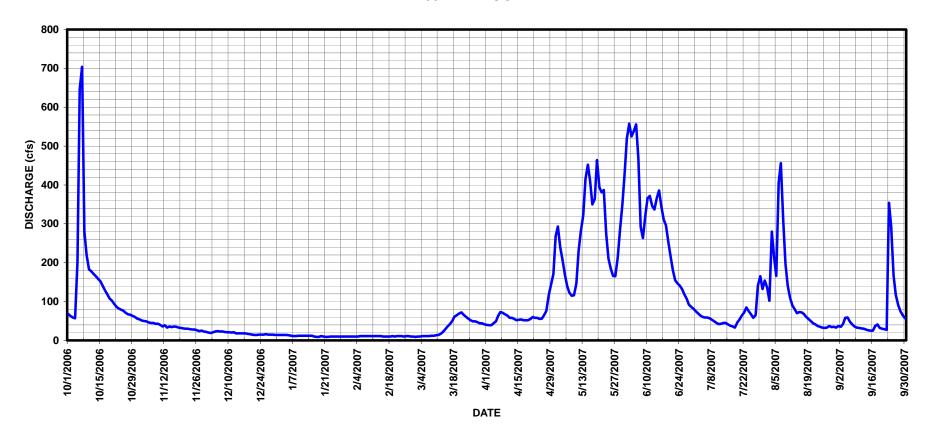
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	54	20e	14	10e	9.0e	40	268	519	75	136	37
2	62	51	19e	14e	10e	10e	39	293	558	69	102	35
3	59	50	21e	14e	10e	10e	39	239	525	64	280	42
4	57	49	23e	14	10e	11e	44	207	539	60	215	58
5	202	46	24	13	11	11	49	169	556	59	166	59
6	647	45	23	12e	11	11	63	140	469	59	406	48
7	704	45	23	11e	11	11	73	123	292	57	456	41
8	280	43	22	11e	11	12	71	115	263	53	308	36
9	220	43	21	12e	11	12	67	116	321	49	197	33
10	183	40	21	12e	11	13	64	146	366	45	141	32
11	178e	36	20	12	11	14	58	230	372	42	109	31
12	171e	: 39	21	12	11	17	58	281	346	43	90	30
13	165e	33	18e	12	11	22	55	322	337	45	80	28
14	158e	: 36	18e	12	11	29	52	415	367	45	70	26
15	152e	: 34	18	12e	10e	36	53	452	386	41	73	25
16	140e	: 36	18	10e	10e	42	54	410	345	38	72	25
17	128e		18	9.0e	10e	50	52	350	311	36	68	37
18	118e		17	9.0e	10e	61	52	364	296	33	60	41
19	108	32	16e	11e	11	65	52	464	253	46	55	32
20	102	31	15e	10e	10	69	55	394	216	54	50	30
21	94	30	14e	9.0e	11	72	60	381	181	64	44	29
22	86	30	14e	9.0e	11	66	58	387	155	72	41	27
23	82	29	15e	10e	11	61	58	274	147	85	37	354
24	79	28	15e	10e	10	56	55	211	141	75	35	294
25	76	28	15e	10e	11	52	56	184	132	67	33	167
26	71	26	16	10e	11	49	65	166	119	58	32	117
27	67	24	15	10e	10	49	76	165	107	65	33	91
28	66	25	15	10e	10	47	117	213	92	141	37	75
29	63	23	15	10e		44	143	283	86	165	34	65
30	60	22e	14	10e		44	171	349	81	132	35	57
31	56		14e	10e		41		428		154	33	
TOTAL	4702	1076	558	344.0	296	1096.0	1949	8539	8878	2091	3528	2002
MEAN	152	35.9	18.0	11.1	10.6	35.4	65.0	275	296	67.5	114	66.7
AC-FT	9330	2130	1110	682	587	2170	3870	16940	17610	4150	7000	3970
MAX	704	54	24	14	11	72	171	464	558	165	456	354
MIN	56	22	14	9.0	10	9.0	39	115	81	33	32	25
CAL YR	2006	TOTAL	28486 M	EAN	78.0 MAX	704	4 MIN	7.9	AC-FT	56500		

CAL YR 2006 TOTAL 28486 MEAN 78.0 MAX 704 MIN 7.9 AC-FT 56500 WTR YR 2007 TOTAL 35059 MEAN 96.1 MAX 704 MIN 9.0 AC-FT 69540

MAX DISCH: 1590 CFS AT 00:30 ON Oct. 7, 2006 GH 4.52 FT. SHIFT -0.03 FT. (Estimated) MAX GH: 4.52 FT. AT 00:30 ON Oct. 7, 2006 (Estimated)

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.  $\ensuremath{\mathsf{e}}\xspace-\mathsf{Estimated}$ 

## 09362750 FLORIDA RIVER ABOVE LEMON RESERVOIR NEAR DURANGO CO WY2007 HYDROGRAPH



## FLORIDA RIVER BELOW LEMON RESERVOIR NEAR DURANGO, CO

LOCATION.--Lat 37°22'50", long 107°39'43", in NE4NW4 sec. 20, T.36 N., R.7 W., NMPM, La Plata County.

DRAINAGE AREA. -- 69.1 mi<sup>2</sup>.

GAGE.--Water-stage recorder with a Sutron Satlink 2 HDR DCP with a shaft encoder on a separate float in a 42" corrugated metal shelter and well and a concrete control. The primary reference gage is a steel drop tape in the gage. The DCP record is the primary record. Datum of gauge is 7,960 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Record is complete and reliable. Record good. Diversions for irrigation of up to 80 acres upstream of gage. Flow regulated by Lemon Reservoir, capacity 40,100 acre feet. Station maintained and record developed by Brian Boughton.

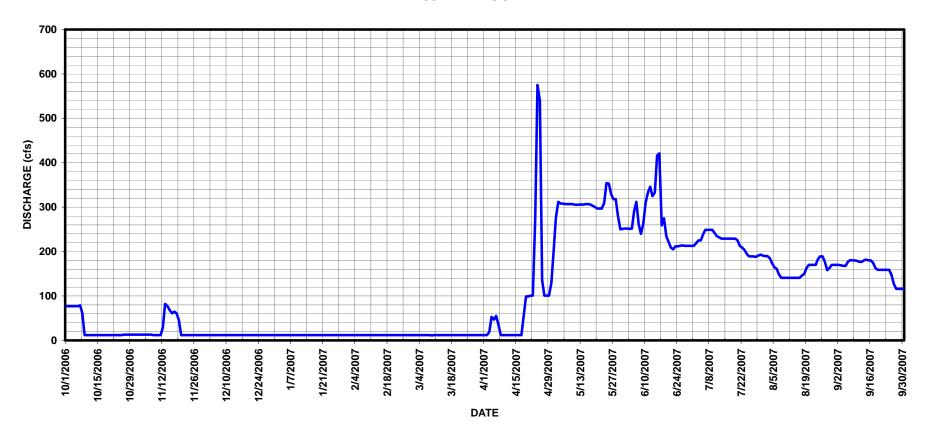
RATING TABLE. -- FLOBLECO02 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHAR	GE, IN CFS		YEAR OCTO		TO SEPTE	MBER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	13	12	12	12	12	12	201	252	213	190	170
2	77	13	12	12	12	12	12	276	252	219	190	170
3	77	13	12	12	12	12	19	312	251	225	185	169
4	77	13	12	12	12	12	53	308	252	225	174	168
5	77	13	12	12	12	12	47	308	291	239	165	168
6	77	13	12	12	12	12	55	307	312	249	161	177
7	79	13	12	12	12	12	36	307	262	249	149	181
8	61	12	12	12	12	12	12	307	240	249	141	180
9	12	12	12	12	12	11	12	307	263	249	141	180
10	12	12	12	12	12	12	12	306	309	242	141	179
11	12	12	12	12	12	12	12	305	332	235	141	177
12	12	29	12	12	12	12	12	306	346	232	141	177
13	12	82	12	12	12	12	12	306	325	229	141	180
14	12	77	12	12	12	12	12	306	333	229	141	182
15	12	68	12	12	12	12	12	307	416	229	141	180
16	12	61	12	12	12	12	12	307	421	229	141	180
17	12	65	12	12	12	12	12	306	259	229	146	174
18	12	61	12	12	12	12	57	303	275	229	150	163
19	12	45	12	12	12	12	99	300	234	229	163	159
20	12	12	12	12	12	12	99	297	222	225	170	159
21	12	12	12	12	12	12	101	297	209	213	170	159
22	12	12	12	12	12	12	101	297	205	209	170	159
23	12	12	12	12	12	12	276	310	212	204	170	159
24	12	12	12	12	12	12	575	354	212	195	183	159
25	12	12	12	12	12	12	540	353	213	189	189	147
26	13	12	12	12	12	12	136	330	214	189	189	127
27	13	12	12	12	12	12	101	318	213	189	177	116
28	13	12	12	12	12	12	101	318	213	188	158	116
29	13	12	12	12		12	101	280	213	191	163	116
30	13	12	12	12		12	130	250	213	193	170	116
31	13		12	12		12		251		191	170	
TOTAL	884	759	372	372	336	371	2771	9340	7964	6805	5021	4847
MEAN	28.5	25.3	12.0	12.0	12.0	12.0	92.4	301	265	220	162	162
AC-FT	1750	1510	738	738	666	736	5500	18530	15800	13500	9960	9610
MAX	79	82	12	12	12	12	575	354	421	249	190	182
MIN	12	12	12	12	12	11	12	201	205	188	141	116
CAL YR	2006	TOTAL	28008.4	MEAN	76.7	MAX	254 MI	N	7.7 AC-1	FT 55.	550	
	2007	TOTAL	39842	MEAN	109	MAX	575 MI		11 AC-1		030	
	_00,	-01111	22012				0.0 111		110	, ,		

MAX DISCH: 761 CFS AT 13:45 ON Apr. 25, 2007 GH 4.55 FT. SHIFT 0.03 FT. MAX GH: 4.55 FT. AT 13:45 ON Apr. 25, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## FLORIDA RIVER BELOW LEMON RESERVOIR NEAR DURANGO CO WY2007 HYDROGRAPH



## 09357500 ANIMAS RIVER AT HOWARDSVILLE, CO

LOCATION.--Lat 37°49'59", long 107°35'56", in SE4SE4 sec. 2, T.41 N., R.7 W., NMPM, San Juan County.

DRAINAGE AREA. -- 55.9 mi<sup>2</sup>.

GAGE.--Graphic water stage-recorder and a Sutron 8200 DCP with a shaft encoder on a separate float in a 36"x 36" wooden shelter and well. The DCP record is the primary record. The primary reference gage is a steel drop tape referenced to an adjustable reference point on the instrument shelf. A high data rate (HDR) Sutron Satlink 2 DCP was installed on August 22, 2007. An air temperature sensor was mounted to the antenna mast on the same day. Datum of gage is 9,616.98 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 18, 1939, at datum 1.00 ft. higher.

REMARKS.--The record is complete. Record is reliable, except for the following periods when the stage-discharge relationship was affected by ice: Nov. 30; Dec. 1-4, 9-10, 12, 21-25 2006; Jan 1-3, 6-10, 12-19, 21-31; Feb 1-5, 9, 13, 15-18, 21-22, 24-25, 28; Mar 1-6, 2007. Record good, except for the winter period of ice effect, which is poor. Station maintained and record developed by Cheston Hart.

RATING TABLE. -- ANIHOWCO08 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE,	IN (	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007
			1	MEAN V	/ALUES				

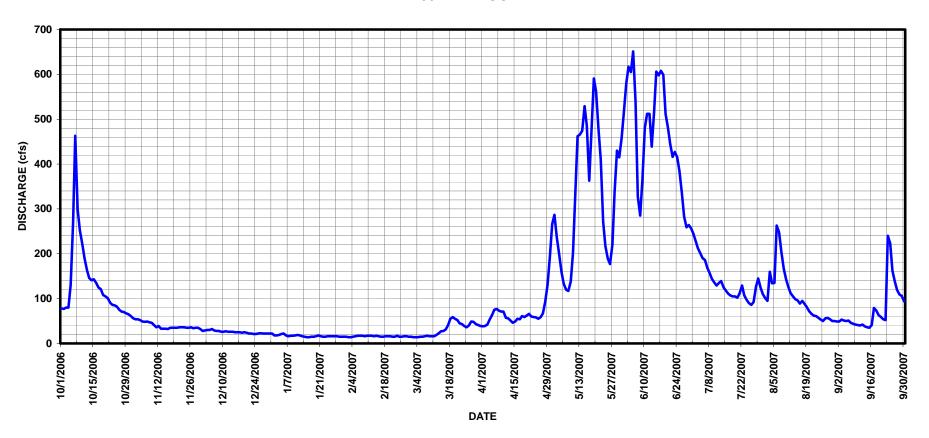
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	56	28e	18e	15e	15e	38	266	516	245	101	49
2	77	54	29e	18e	14e	14e	39	287	580	228	95	49
3	80	54	30e	19e	14e	14e	42	236	617	212	160	53
4	80	52	30e	21	15e	14e	53	200	605	201	134	51
5	131	49	32	22	16e	15e	63	160	651	190	135	50
6	269	48	29	18e	17	15e	75	133	538	186	263	51
7	463	49	28	16e	17	16	77	120	328	169	248	46
8	299	47	28	17e	17	17	73	117	285	157	205	44
9	252	46	26e	17e	16e	16	71	138	366	144	167	42
10	222	41	26e	18e	17	16	71	202	481	136	144	41
11	190	36	27	19	17	16	57	335	512	129	126	40
12	164	39	26e	18e	17	19	56	462	512	135	112	42
13	146	33	26	16e	16e	23	51	466	439	139	105	38
14	141	33	26	15e	17	27	46	474	514	125	99	36
15	143	33	25	14e	16e	28	49	529	606	118	96	35
16	135	32	25	14e	15e	31	55	485	598	111	89	41
17	125	35	25	15e	15e	41	54	363	608	107	95	79
18	121	35	24	15e	16e	55	61	474	599	105	88	73
19	108	35	25	16e	16	59	59	591	512	105	81	63
20	105	35	24	18	16	55	62	561	481	102	72	59
21	101	36	22e	16e	15e	52	66	477	445	112	66	54
22	91	36	22e	15e	15e	45	60	410	416	129	62	52
23	86	36	21e	15e	17	43	59	271	427	107	61	240
24	85	35	21e	16e	15e	39	58	217	415	97	57	223
25	82	35	22e	16e	15e	36	55	189	384	90	53	162
26	75	36	23	16e	16	40	58	177	335	86	50	138
27	71	34	22	16e	16	49	67	221	283	92	56	119
28	70	35	22	16e	15e	48	92	338	259	126	57	109
29	67	35	22	15e		43	131	430	264	145	54	106
30	65	32e	22	15e		41	191	415	257	124	50	94
31	61		22	15e		39		458		110	50	
TOTAL	4183	1192	780	515	443	981	1989	10202	13833	4262	3231	2279
MEAN	135	39.7	25.2	16.6	15.8	31.6	66.3	329	461	137	104	76.0
AC-FT	8300	2360	1550	1020	879	1950	3950	20240	27440	8450	6410	4520
MAX	463	56	32	22	17	59	191	591	651	245	263	240
MIN	61	32	21	14	14	14	38	117	257	86	50	35
CAL YR	2006	TOTAL	38074 ME	EAN	104 MAX	675	MIN	14	AC-FT	75520		

CAL YR 2006 TOTAL 38074 MEAN 104 MAX 675 MIN 14 AC-FT 75520 WTR YR 2007 TOTAL 43890 MEAN 120 MAX 651 MIN 14 AC-FT 87060

MAX DISCH: 853 CFS AT 21:00 ON Jun. 15, 2007 GH 3.14 FT. SHIFT -0.01 FT. MAX GH: 3.14 FT. AT 21:00 ON Jun. 15, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

## 09357500 ANIMAS RIVER AT HOWARDSVILLE CO WY2007 HYDROGRAPH



## LA PLATA AND CHERRY CREEK DITCH NEAR HESPERUS, CO

LOCATION.--Lat 37°19′26″, long 108°03′41″, in SE4NW4 sec. 3, T.35 N., R.11 W., NMPM, La Plata County.

DRAINAGE AREA. --N/A

GAGE.--Sutron Satlink DCP with a shaft encoder in a wood shelter and corrugated metal well at a a 5-foot concrete Parshall Flume. The DCP record is the primary record with satellite data used for backup purposes. Primary reference gage is outside staff gage installed in flume.

REMARKS.--Record is complete and reliable. Record good. Station maintained by Matthew A. Schmitt. Record developed by Brian Boughton and Jason Morrow.

RATING TABLE.--LPCDITCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

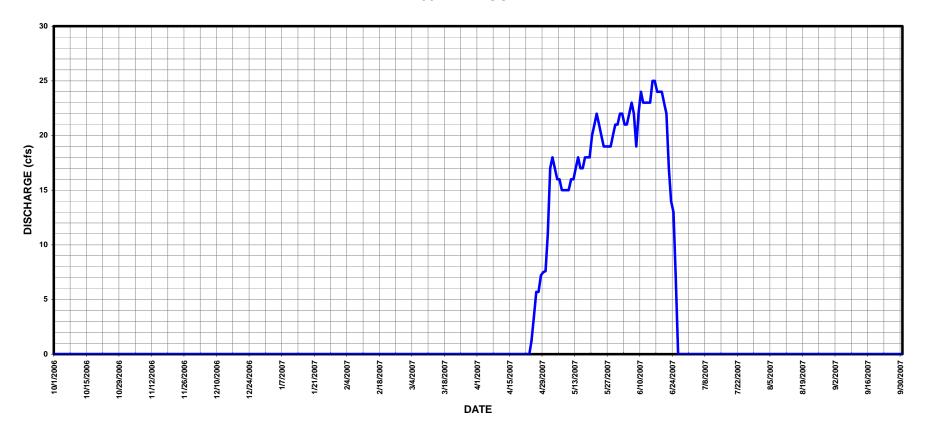
## DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0	0	11	22	0	0	0
2	0	0	0	0	0	0	0	17	22	0	0	0
3	0	0	0	0	0	0	0	18	21	0	0	0
4	0	0	0	0	0	0	0	17	21	0	0	0
5	0	0	0	0	0	0	0	16	22	0	0	0
6	0	0	0	0	0	0	0	16	23	0	0	0
7	0	0	0	0	0	0	0	15	22	0	0	0
8	0	0	0	0	0	0	0	15	19	0	0	0
9	0	0	0	0	0	0	0	15	22	0	0	0
10	Ō	0	Ō	0	Ō	Ö	0	15	24	0	Ō	Ō
11	0	0	0	0	0	0	0	16	23	0	0	0
12	0	0	0	0	0	0	0	16	23	0	0	0
13	Ō	0	Ō	0	0	Ö	0	17	23	0	0	Ō
14	0	0	0	0	0	Ō	0	18	23	0	0	0
15	0	0	0	0	0	0	0	17	25	0	0	0
16	0	0	0	0	0	0	0	17	25	0	0	0
17	0	0	0	0	0	0	0	18	24	0	0	0
18	0	0	0	0	0	0	0	18	24	0	0	Ö
19	0	0	0	0	0	0	0	18	24	0	0	0
20	0	0	0	0	0	0	0	20	23	0	0	0
21	0	0	0	0	0	Ō	0	21	22	0	0	0
22	0	0	0	0	0	0	0	22	17	0	0	0
23	0	0	0	0	0	0	0	21	14	0	0	0
24	0	0	0	0	0	0	1.2	20	13	0	0	0
25	0	Ö	0	Õ	Ö	Ö	3.4	19	7.1	0	Õ	Ö
26	0	0	0	0	0	Ō	5.7	19	0	0	0	0
27	0	0	0	0	0	0	5.7	19	0	0	0	0
28	0	0	0	0	0	0	7.2	19	0	0	0	0
29	0	0	0	0		Ō	7.5	20	0	0	0	0
30	Ö	Ö	0	Õ		Ö	7.6	21	0	0	Õ	Ö
31	0		0	0		Ō		21		0	0	
~ -	•		•	-		•				•	-	
TOTAL	0	0	0	0	0	0	38.3	552	528.1	0	0	0
MEAN	0	0	0	0	0	Ō	1.28	17.8	17.6	0	0	0
AC-FT	Ō	0	Ō	0	Ō	Ö	76	1090	1050	0	Ō	Ō
MAX	0	0	0	0	0	0	7.6	22	25	0	0	0
MIN	0	0	0	0	0	0	0	11	0	0	0	0
	· ·	· ·	ŭ	3	ŭ	ŭ	ŭ		Ü	ŭ	ŭ	J
CAL YR	2006	TOTAL	905.32 ME	AN	2.48 MAX	33	MIN	0	AC-FT	1800		
WTR YR	2007	TOTAL	1118.4 ME		3.06 MAX	25		0	AC-FT	2220		

MAX DISCH: 26 CFS AT 23:15 ON Jun. 15, 2007 GH 1.17 FT. SHIFT 0.01 FT. MAX GH: 1.17 FT. AT 23:15 ON Jun. 15, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

## LA PLATA AND CHERRY CREEK DITCH NEAR HESPERUS CO WY2007 HYDROGRAPH



## PINE RIDGE DITCH NEAR HESPERUS, CO

LOCATION.--Lat 37°17'31", long 108°02'07", in SW4NE4 sec. 14, T.35 N., R.11 W., NMPM, La Plata County.

DRAINAGE AREA. --N/A

CAL YR 2006

WTR YR 2007

TOTAL

TOTAL

GAGE.--Sutron Satlink 2 HDR DCP with shaft encoder and graphic water-stage recorder on separate floats in a 42" diameter corrugated metal shelter and concrete well at a 3-foot Parshall Flume. Primary reference gage is outside staff gage installed in flume. On July 6, 2007 the graphic chart recorder was removed and a Sutron Stage-Discharge recorder was installed.

REMARKS.--Record complete and reliable, except for March 12-16, 2007, due to ice affecting the stage-discharge relationship; and, November 28-30, December 1-5, 2006, when the floats were frozen in the well. Record good, except for days on which ice affected the stage-discharge relationship and floats were froze in the well. Record during this period should be considered poor. Station maintained by Matthew A. Schmitt. Record developed by Brian Boughton.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- PINDITCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE	1, IN CID		EAN VALUES		IO DELIER	IDDIK 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	6.7	4.7e	0	0	0	0	2.8	3.7	0	0	2.4
2	1.4	7.2	4.5e	0	0	0	0	4.1	3.8	0	0	1.2
3	1.4	7.5	4.5e	0	0	0	0	3.5	3.8	0	.11	.20
4	.08	7.5	2.0e	0	0	0	0	3.0	3.7	0	2.7	.19
5	.42	7.3	0	0	0	0	0	3.2	3.7	0	1.8	.19
6	2.9	7.5	0	0	0	0	.97	3.0	4.1	0	.02	.19
7	4.2	7.9	0	0	0	0	4.7	3.0	2.2	0	2.1	.05
8	3.0	7.9	0	0	0	0	5.1	3.0	.68	0	3.2	0
9	2.2	7.9	0	0	0	0	5.1	2.7	3.2	0	.01	0
10	5.2	7.7	0	0	0	0	4.8	2.5	4.7	0	0	0
11	5.4	7.7	0	0	0	0	4.0	2.7	3.5	0	0	0
12	5.6	7.6	0	0	0	0e	2.5	4.2	2.8	0	0	0
13	5.4	7.5	0	0	0	.58e	2.5	4.3	1.3	0	0	0
14	4.2	7.4	0	0	0	1.7e	2.4	3.3	2.4	0	0	0
15	6.6	7.0	0	0	0	1.5e	2.4	2.9	1.8	0	0	0
16	7.5	6.7	0	0	0	1.7e	2.5	2.7	.34	0	0	0
17	6.3	6.5	0	0	0	4.2	3.1	3.0	.22	0	0	0
18	5.9	6.3	0	0	0	4.1	3.1	2.8	.17	0	0	0
19	5.1	6.0	0	0	0	5.7	2.9	2.7	0	0	0	0
20	5.6	5.9	0	0	0	6.9	2.8	2.8	0	0	0	0
21	4.8	5.8	0	0	0	6.8	3.9	2.7	0	0	0	0
22	3.8	5.7	0	0	0	6.8	3.9	2.8	0	0	0	0
23	4.7	5.6	0	0	0	6.5	3.9	3.1	0	0	0	0
24	5.2	5.6	0	0	0	6.3	3.5	2.9	0	0	0	0
25	5.2	5.2	0	0	0	6.1	3.1	2.6	0	0	0	0
26	4.6	5.1	0	0	0	5.9	3.2	2.5	0	0	0	0
27	3.6	5.0	0	0	0	5.9	3.6	2.5	0	0	0	0
28	3.9	5.0e	0	0	0	3.5	3.8	2.5	0	0	0	0
29	5.3	4.8e	0	0		0	3.3	2.9	0	0	0	0
30	5.0	4.7e	0	0		0	2.8	3.5	0	0	0	0
31	5.9		0	0		0		3.8		0	0	
TOTAL	132.00	196.2	15.7	0	0	74.18	83.87	94.0	46.11	0	9.94	4.42
MEAN	4.26	6.54	.51	0	0	2.39	2.80	3.03	1.54	0	.32	.15
AC-FT	262	389	31	0	0	147	166	186	91	0	20	8.8
MAX	7.5	7.9	4.7	0	0	6.9	5.1	4.3	4.7	0	3.2	2.4
MIN	.08	4.7	0	0	0	0	0	2.5	0	0	0	0

MAX DISCH: 8.79 CFS AT 17:45 ON Oct. 12, 2006 GH 0.84 FT. SHIFT -0.02 FT. MAX GH: 0.84 FT. AT 17:45 ON Oct. 12, 2006

1.35 MAX

1.80 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

491.7 MEAN

656.42 MEAN

8.1 MIN

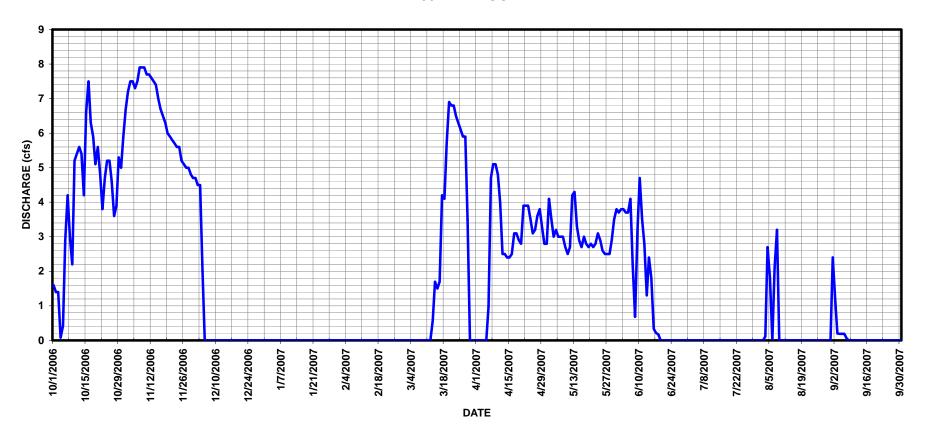
7.9 MIN

0 AC-FT

0 AC-FT

1300

## PINE RIDGE DITCH NEAR HESPERUS CO WY2007 HYDROGRAPH



## 09365500 LA PLATA RIVER AT HESPERUS, CO

LOCATION.--Lat 37°17'23", long 108°02'24", in NE4SW4 sec. 14, T.35 N., R.11 W., NMPM La Plata County, Hydrologic Unit 14080105, on right bank at Hesperus 700 ft downstream from U.S. Highway 160.

DRAINAGE AREA AND PERIOD OF RECORD.--37 mi<sup>2</sup>, approximately. Periodic data June 1904 to Nov. 1910. Continuous from June 1917 to current year, with some periods of monthly data only.

GAGE.--Graphic water stage-recorder and a Sutron Satlink 2 HDR DCP with a shaft encoder on a separate float in a 64"x 64" concrete block shelter and a 42" concrete well. The DCP record is the primary record. Primary reference gage is an electric tape in the well. The station is also equipped with a Sutron air temperature sensor and an electric heater which is used to keep the well from freezing in the winter. Control is man-made concrete ramp flume located approximately 15 feet downstream. A NEMA enclosed Satlink 2 was installed on March 7, 2007 to protect the DCP from moisture. Datum of gage is 8,104.71 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record from the DCP is complete, any data missing from the initial satellite transmissions were filled in from the DCP logger files. It is reliable, except for the following days when ice on the control affected the gage height: Nov. 30; Dec. 1-5, 12, 13, 19-26, 31, 2006; Jan. 1-4, 6-10, 13-31, Feb. 1-6, 15-18, 21, 22, 24, 25; Mar. 1-5, 2007. Record good, except for days on which ice affected the stage-discharge relationship. Record during this period should be considered poor. Station maintained and record developed by Brian Boughton.

RATING TABLE. -- LAPHESCO37 USED FROM 01-OCT-2006 TO 30-SEP-2007

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

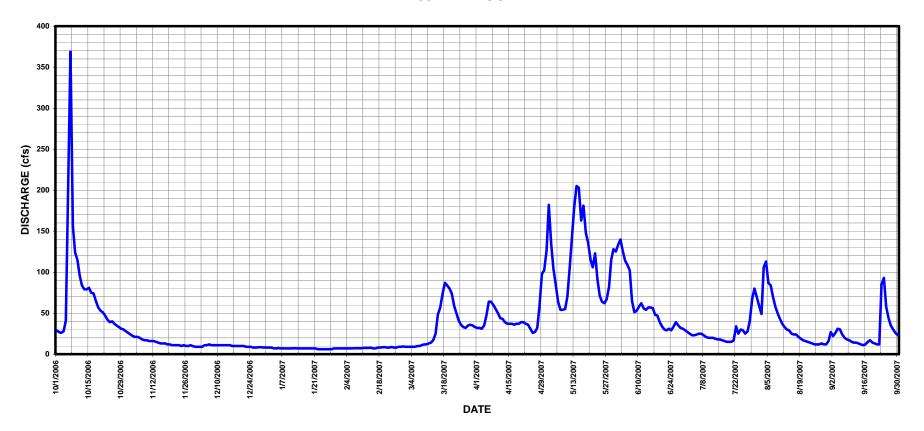
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	26	9.0∈	8.0e	7.0e	9.0e	32	126	133	27	59	27
2	27	24	9.0∈	8.0e	7.0e	9.0e	32	182	140	25	49	22
3	26	22	9.0∈	7.0e	7.0e	9.0e	31	134	126	23	106	26
4	28	21	11∈	7.0e	7.0e	9.0e	35	104	114	23	113	31
5	41	21	11∈	7.5	7.0e	9.0e	47	84	109	24	87	30
6	211	20	12	7.0e	7.0e	9.8	64	64	102	25	84	24
7	369	18	11	7.0e	7.2	10	64	54	65	25	70	20
8	156	17	11	7.0e	7.3	11	60	54	51	23	58	18
9	124	17	11	7.0e	7.3	12	55	55	53	21	50	17
10	115	16	11	7.0e	7.3	12	50	70	58	20	43	15
11	96	16	11	7.0	7.7	13	44	104	62	20	37	14
12	84	16	11∈	7.3	7.6	14	43	143	56	20	33	14
13	79	15	11∈	7.0e	7.6	17	39	179	54	19	30	13
14	79	14	1,1	7.0e	7.8	25	37	205	57	18	29	12
15	81	13	1,1	7.0e	7.0e	48	37	203	57	18	25	11
16	75	13	10	7.0e	7.0e	57	37	163	56	17	24	12
17	74	13	10	7.0e	8.0e	73	36	181	48	16	24	15
18	65	12	10	7.0e	8.0e	87	37	148	47	15	21	17
19	57	12	10∈	7.0e	8.3	84	37	136	39	15	19	14
20	53	11	10∈	7.0e	8.5	80	39	116	34	15	17	13
21	51	11	10∈	7.0e	8.0e	74	39	106	30	17	16	12
22	47	11	9.0∈	6.0e	8.0e	59	37	123	29	34	15	12
23	42	11	9.0∈	6.0e	8.7	50	36	92	31	25	14	85
24	39	10	9.0∈			41	31	71	29	30	13	93
25	40	11	8.0∈			36	26	64	34	29	12	58
26	37	10	8.0∈			33	27	62	39	25	12	44
27	35	10	8.2	6.0e		32	32	67	35	28	12	35
28	33	11	8.5	6.0e		35	59	82	32	41	13	30
29	31	9.8	8.2	7.0e		36	98	115	31	68	12	26
30	30	9.0∈		7.0e		35	102	128	29	80	12	23
31	28		8.0e	7.0e		33		125		69	16	
TOTAL	2282	440.8	304.1	212.8	216.6	1061.8	1343	3540	1780	855	1125	783
MEAN	73.6	14.7	9.81	6.86	7.74	34.3	44.8	114	59.3	27.6	36.3	26.1
AC-FT	4530	874	603	422	430	2110	2660	7020	3530	1700	2230	1550
MAX	369	26	12	8.0	9.4	87	102	205	140	80	113	93
MIN	26	9.0	8.0	6.0	7.0	9.0	26	54	29	15	12	11
CAL YR	2006	TOTAL	10802.8	MEAN	29.6 MAX	36	9 MIN	2.9	AC-FT	21430		

CAL YR 2006 TOTAL 10802.8 MEAN 29.6 MAX 369 MIN 2.9 AC-FT 21430 WTR YR 2007 TOTAL 13944.1 MEAN 38.2 MAX 369 MIN 6.0 AC-FT 27660

MAX DISCH: 704 CFS AT 22:45 ON Oct. 6, 2006 GH 5.42 FT. SHIFT 0.04 FT. MAX GH: 5.42 FT. AT 22:45 ON Oct. 6, 2006

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.  $\ensuremath{\text{e-Estimated}}$ 

## 09365500 LA PLATA RIVER AT HESPERUS CO WY2007 HYDROGRAPH



## CHERRY CREEK AT THE MOUTH NEAR RED MESA, CO

LOCATION.--Lat 37°07'03", long 108°11'53", in NW4SW4 sec. 7, T.33 N., R.12 W., NMPM, La Plata County.

DRAINAGE AREA. -- 66 mi<sup>2</sup>.

GAGE.--Graphic water-stage recorder and a Sutron SatLink 2 HDR DCP with shaft encoder on separate floats in a concrete block shelter and 42-inch diameter corrugated metal well. The primary reference gage is a steel drop tape referenced to a reference point (RP) on the wooden instrument shelf. Datum of gauge is 6,450 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Record is complete and reliable, except for the following periods: Oct. 18-20, 2006, when the shaft encoder did not track the change in stage, and chart record was used; Nov. 11, 15-24, 26-27, 29-30, Dec. 1-21, 2006, and Mar. 6-9, 2007, when the stage-discharge relationship affected by ice; and, Dec. 22-31, 2006, Jan. 1-31, Feb 1-28, and Mar. 1-5, 2007, when the floats frozen in the well. Record fair, except for days on which ice affected the stage-discharge relationship and the floats were frozen in the well. Record during this period should be considered poor. The instantaneous peak flow should also be considered poor since it was estimated, and the estimated flow rate is more than 2 times the highest measured flow rate at the gage. Record developed by Brian Boughton.

RATING TABLE. -- CHEREDCO03A USED FROM 01-OCT-2006 TO 30-SEP-2007

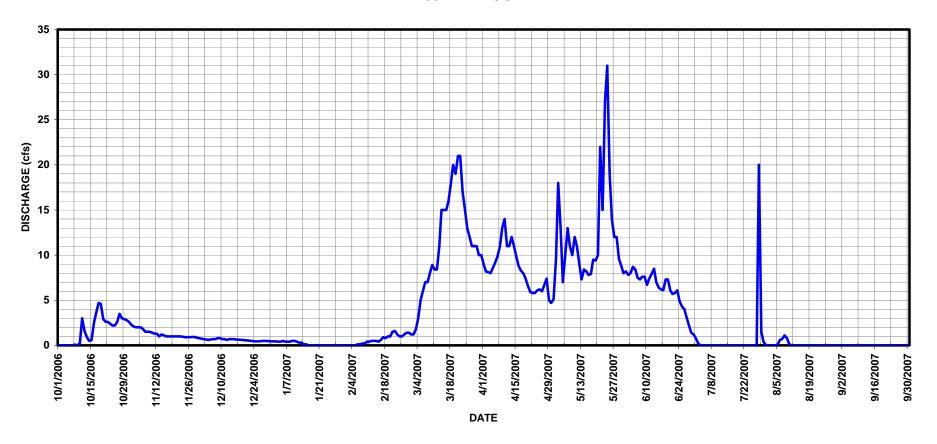
DISCHARGE,	ΙN	CFS,	WATER	YEAR	OCTOBER	2006	TO	SEPTEMBER	2007
			MEA		/ALUES				

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.3	.75e	.45e	0e	1.2e	9.0	5.1	8.2	.75	0	0
2	0	2.1	.70e	.45e	0e	1.2e	8.2	9.5	7.8	.22	0	0
3	0	2.0	.65e	.40e	0e	1.8e	8.1	18	8.0	0	0	0
4	0	2.0	.60e	.40e	0e	3.0e	8.0	13	8.7	0	0	0
5	0	2.0	.65e	.50e	0e	5.0e	8.6	7.0	8.4	0	.07	0
6	0	1.8	.70e	.40e	.10e	6.0e	9.2	10	7.5	0	.60	0
7	0	1.5	.70e	.40e	.10e	7.0e	9.9	13	7.3	0	.71	0
8	.07	1.5	.80e	.40e	.20e	7.0e	11	11	7.6	0	1.1	0
9	0	1.5	.80e	.50e	.20e	8.0e	13	10	7.6	0	.78	0
10	.24	1.4	.70e	.50e	.40e	8.9	14	12	6.7	0	.13	0
11	3.0	1.3e	.70e	.40e	.40e	8.4	11	11	7.4	0	0	0
12	1.6	1.3	.60e	.30e	.50e	8.4	11	9.0	7.9	0	0	0
13	.90	1.0	.70e	.30e	.50e	11	12	7.3	8.5	0	0	0
14	.50	1.2	.70e	.10e	.50e	15	11	8.4	7.0	0	0	0
15	.59	1.1e	.70e	.10e	.40e	15	9.9	8.2	6.4	0	0	0
16	2.5	1.0e	.64e	0e	.60e	15	8.8	7.8	6.2	0	0	0
17	3.6	1.0e	.64e	0e	.90e	16	8.3	7.9	6.1	0	0	0
18	4.7	1.0e	.60e	0e	.80e	18	8.0	9.5	7.3	0	0	0
19	4.6	1.0e	.60e	0e	1.0e	20	7.4	9.4	7.3	0	0	0
20	2.9	1.0e	.55e	0e	1.0e	19	6.6	10	6.1	0	0	0
21	2.6	1.0e	.55e	0e	1.5e	21	5.9	22	5.7	0	0	0
22	2.6	1.0e	.50e	0e	1.6e	21	5.8	15	5.8	0	0	0
23	2.4	.95e	.48e	0e	1.2e	17	5.8	27	6.1	0	0	0
24	2.2	.90e	.45e	0e	1.0e	15	6.1	31	4.9	0	0	0
25	2.2	.91	.45e	0e	1.0e	13	6.2	19	4.3	0	0	0
26	2.6	.90e	.45e	0e	1.2e	12	6.0	14	4.0	0	0	0
27	3.5	.92e		0e	1.4e	11	6.7	12	3.1	0	0	0
28	3.0	.94	.50e	0e	1.4e	11	7.4	12	2.2	20	0	0
29	2.9	.85e	.48e	0e		11	5.0	9.6	1.4	1.5	0	0
30	2.8	.80e	.48e	0e		10	4.7	8.8	1.2	.37	0	0
31	2.6		.45e	0e		10		8.0		.03	0	
TOTAL	54.60	38.17	18.75	5.60	17.90	346.9	252.6	375.5	186.7	22.87	3.39	0
MEAN	1.76	1.27	.60	.18	.64	11.2	8.42	12.1	6.22	.74	.11	0
AC-FT	108	76	37	11	36	688	501	745	370	45	6.7	0
MAX	4.7	2.3	.80	.50	1.6	21	14	31	8.7	20	1.1	0
MIN	0	.80	.45	0	0	1.2	4.7	5.1	1.2	0	0	0
CAL YR	2006	TOTAL	666.11		1.82 MAX		5 MIN		AC-FT	1320		

WTR YR 2007 TOTAL 1322.98 MEAN 3.62 MAX 31 MIN 0 AC-FT 2620 MAX DISCH: 290 CFS AT 16:45 ON Jul. 28, 2007 GH 6.01 FT. SHIFT 0 FT. (Estimated) MAX GH: 6.01 FT. AT 16:45 ON Jul. 28, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

## CHERRY CREEK AT THE MOUTH NEAR RED MESA CO WY2007 HYDROGRAPH



#### LONG HOLLOW AT THE MOUTH NEAR RED MESA, CO

LOCATION.-- Lat 37°03'02", long 108°10'23", in SE4SW4 sec. 32, T.33 N., R.12 W., NMPM, La Plata County.

DRAINAGE AREA. -- 46.5 mi<sup>2</sup>.

GAGE. -- Graphic water-stage recorder with a Sutron Satlink 2 HDR DCP and shaft encoder on separate floats in a 3' by 3' wooden shelter and well at a 4-foot Parshall Flume. Primary reference gage is outside staff gage installed in flume. The DCP record is the primary record. Between August  $23^{\rm rd}$  and September  $6^{\rm th}$  part of the wooden well gave way and partially filled the well with dirt. On September 6<sup>th</sup> the stream side of the wooden well was removed and replaced with new pressure treated lumber. Datum of gauge is 6,190 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Record from the DCP is complete, any data missing from the initial satellite transmissions was filled in from the DCP logger files or from the chart record. It is reliable, except for the following periods: stage-discharge relationship affected by ice: Dec. 1-4, 18-31, 2006; Jan. 1-6; Feb. 8-28, Mar. 1-5, 2007; floats were frozen in the well: Dec. 5, 2006; Jan. 7-31; Feb. 1-7, 2007; and, shaft encoder float covered in mud caused by a gopher digging next to the well: Aug. 23-31, 2007. Chart record was used to develop this part of the record. Record fair, except for days on which ice affected the stage-discharge relationship and floats were frozen in the well, which are poor. Station maintained and record developed by Brian Boughton.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

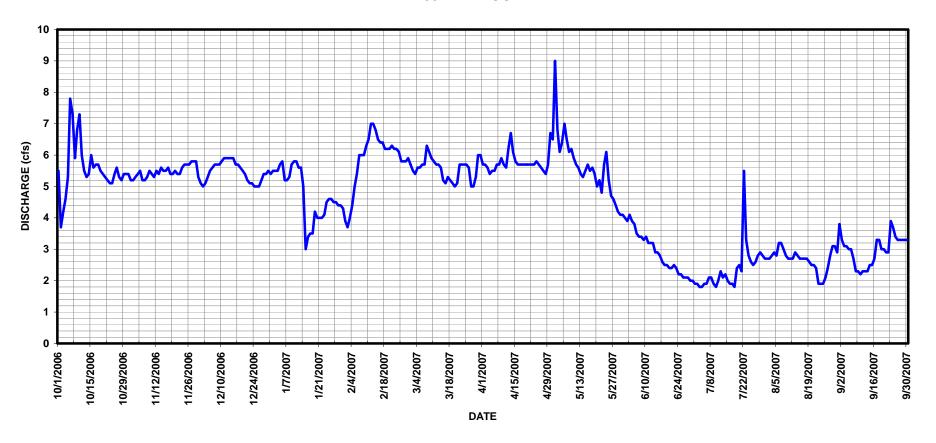
RATING TABLE. -- LONREDCOO1 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHAP	GE, IN CE		EAN VALUE	ES 2000	IO SEFIE	MDER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	5.2	5.1e	5.5e	3.9e	5.7e	5.7	6.5	4.0	1.9	2.7	3.8
2	3.7	5.2	5.0e	5.5e	3.7e	5.5e	5.7	9.0	3.9	1.9	2.7	3.3
3	4.2	5.3	5.1e	5.5e	4.0e	5.4e	5.6	6.8	4.1	1.8	2.8	3.1
4	4.6	5.4	5.3e	5.7e	4.4e	5.6e	5.4	6.1	3.9	1.8	2.9	3.1
5	5.3	5.5	5.5e	5.8e	5.0e	5.6e	5.5	6.4	3.8	1.9	2.8	3.0
6	7.8	5.2	5.6	5.2e	5.4e	5.7	5.5	7.0	3.5	1.9	3.2	3.0
7	7.3	5.2	5.7	5.2e	6.0e	5.7	5.7	6.5	3.4	2.1	3.2	2.7
8	5.9	5.3	5.7	5.3e	6.0e	6.3	5.7	6.1	3.4	2.1	3.0	2.3
9	6.8	5.5	5.7	5.7e	6.0e	6.1	5.9	6.2	3.3	1.9	2.8	2.3
10	7.3	5.4	5.8	5.8e	6.3e	5.9	5.7	5.9	3.4	1.8	2.7	2.2
11	6.0	5.3	5.9	5.8e	6.5e	5.8	5.6	5.7	3.2	2.0	2.7	2.2
12	5.5	5.5	5.9	5.6e	7.0e	5.7	6.2	5.6	3.2	2.3	2.7	2.3
13	5.3	5.4	5.9	5.6e	7.0e	5.7	6.7	5.4	3.2	2.1	2.9	2.3
14	5.4	5.6	5.9	5.0e	6.8e	5.6	6.1	5.3	2.9	2.2	2.8	2.5
15	6.0	5.5	5.9	3.0e	6.5e	5.2	5.8	5.5	2.9	2.0	2.7	2.5
16	5.6	5.5	5.7	3.4e	6.4e	5.1	5.7	5.7	2.8	1.9	2.7	2.7
17	5.7	5.6	5.7	3.5e	6.4e	5.3	5.7	5.5	2.6	1.9	2.7	3.3
18	5.7	5.4	5.6e	3.5e	6.2e	5.2	5.7	5.6	2.5	1.8	2.7	3.3
19	5.5	5.4	5.5e	4.2e	6.2e	5.1	5.7	5.4	2.5	2.4	2.6	3.0
20	5.4	5.5	5.4e	4.0e	6.2e	5.0	5.7	5.0	2.4	2.5	2.5	3.0
21	5.3	5.4	5.2e	4.0e	6.3e	5.1	5.7	5.2	2.4	2.3	2.5	2.9
22	5.2	5.4	5.1e	4.0e	6.2e	5.7	5.7	4.8	2.5	5.5	2.4	2.9
23	5.1	5.6	5.1e	4.1e	6.2e	5.7	5.7	5.7	2.4	3.3	1.9	3.9
24	5.1	5.7	5.0e	4.5e	6.1e	5.7	5.8	6.1	2.2	2.8	1.9	3.7
25	5.4	5.7	5.0e		5.8e	5.7	5.7	5.2	2.2	2.6	1.9	3.4
26	5.6	5.7	5.0e		5.8e	5.6	5.6	4.7	2.1	2.5	2.1	3.3
27	5.3	5.8	5.2e		5.8e	5.0	5.5	4.6	2.1	2.6	2.4	3.3
28	5.2	5.8	5.4e		5.9e	5.0	5.4	4.4	2.1	2.8	2.8	3.3 3.3
29	5.4	5.8	5.4e			5.3	5.7	4.2	2.0	2.9	3.1	3.3
30	5.4	5.3	5.5e			6.0	6.7	4.1	2.0	2.8	3.1	3.3
31	5.4		5.4e	4.3e		6.0		4.1		2.7	2.9	
TOTAL	172.9	164.1	169.2	146.7	164.0	172.0	172.8	174.3	86.9	73.0	85.7	89.3
MEAN	5.58	5.47	5.46	4.73	5.86	5.55	5.76	5.62	2.90	2.35	2.76	2.98
AC-FT	343	325	336	291	325	341	343	346	172	145	170	177
MAX	7.8	5.8	5.9	5.8	7.0	6.3	6.7	9.0	4.1	5.5	3.5	3.9
MIN	3.7	5.2	5.0	3.0	3.7	5.0	5.4	4.1	2.0	1.8	2.3	2.2
CAL YR	2006	TOTAL	1692.3	MEAN	4.64 M	AX	26 MI	N	2.2 AC-FT	3360	)	
WTR YR	2007	TOTAL	1670.9		4.58 M		9.0 MI		1.8 AC-FT	3310		

MAX DISCH: 35 CFS AT 18:45 ON Jul. 22, 2007 GH 1.63 FT. SHIFT 0.01 FT. MAX GH: 1.63 FT. AT 18:45 ON Jul. 22, 2007

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

## LONG HOLLOW AT THE MOUTH NEAR RED MESA CO WY2007 HYDROGRAPH



## PIONEER DITCH AT THE COLORADO-NEW MEXICO STATELINE

LOCATION.--Lat 36°59′58", long 108°11′09", in NW4SE4 sec. 10, T.32 N., R.13 W., NMPM, La Plata County.

## DRAINAGE AREA. -- N/A

GAGE. -- Sutron high data rate Satlink 2 DCP with a shaft encoder in a 30-inch diameter corrugated metal pipe shelter and a 20-inch x 20-inch concrete well at a 1-foot concrete Parshall Flume. The DCP record is the primary record with satellite data used for backup purposes. Primary reference gage is outside staff gage installed in flume.

REMARKS.--Record from the DCP is complete, any data missing from the initial satellite transmissions were filled in from the DCP's logger files. Record is reliable. Record good. Station maintained and record developed by Brian Boughton.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

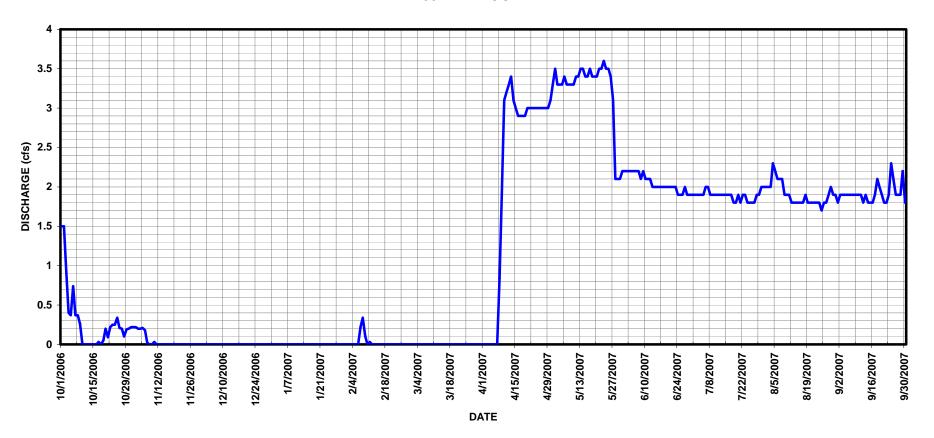
RATING TABLE. -- PIODITCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE,	IN C	MEA	N VALUE		IO SEFIE	MDER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	.22	0	0	0	0	0	3.3	2.2	1.9	2.0	1.8
2	1.5	.22	0	0	0	0	0	3.5	2.2	1.9	2.0	1.9
3	.94	.20	0	0	0	0	0	3.3	2.2	1.9	2.0	1.9
4	.40	.20	0	0	0	0	0	3.3	2.2	1.9	2.3	1.9
5	.37	.21	0	0	0	0	0	3.3	2.2	1.9	2.2	1.9
6	.74	.18	0	0	0	0	0	3.4	2.2	2.0	2.1	1.9
7	.37	.02	0	0	.22	0	0	3.3	2.2	2.0	2.1	1.9
8	.37	0	0	0	.34	0	.84	3.3	2.1	1.9	2.1	1.9
9	.26	0	0	0	.11	0	1.9	3.3	2.2	1.9	1.9	1.9
10	0	.03	0	0	0	0	3.1	3.3	2.1	1.9	1.9	1.9
11	0	0	0	0	.03	0	3.2	3.4	2.1	1.9	1.9	1.9
12	0	0	0	0	0	0	3.3	3.4	2.1	1.9	1.8	1.8
13	0	0	0	0	0	0	3.4	3.5	2.0	1.9	1.8	1.9
14	0	0	0	0	0	0	3.1	3.5	2.0	1.9	1.8	1.8
15	0	0	0	0	0	0	3.0	3.4	2.0	1.9	1.8	1.8
16	0	0	0	0	0	0	2.9	3.4	2.0	1.9	1.8	1.8
17	.03	0	0	0	0	0	2.9	3.5	2.0	1.9	1.8	1.9
18	0	0	0	0	0	0	2.9	3.4	2.0	1.8	1.9	2.1
19	.05	0	0	0	0	0	2.9	3.4	2.0	1.8	1.8	2.0
20	.20	0	0	0	0	0	3.0	3.4	2.0	1.9	1.8	1.9
21	.09	0	0	0	0	0	3.0	3.5	2.0	1.8	1.8	1.8
22	.22	0	Ō	Ō	Ō	Ō	3.0	3.5	2.0	1.9	1.8	1.8
23	.25	0	0	0	0	0	3.0	3.6	2.0	1.9	1.8	1.9
24	.25	0	Ō	Ō	Ō	Ō	3.0	3.5	1.9	1.8	1.8	2.3
25	.34	0	0	0	0	0	3.0	3.5	1.9	1.8	1.7	2.1
26	.21	0	0	0	0	0	3.0	3.4	1.9	1.8	1.8	1.9
27	.20	0	Ō	Ō	Ō	Ō	3.0	3.1	2.0	1.8	1.8	1.9
28	.10	0	0	0	0	0	3.0	2.1	1.9	1.9	1.9	1.9
29	.19	0	0	0		0	3.0	2.1	1.9	1.9	2.0	2.2
30	.20	0	0	0		0	3.1	2.1	1.9	2.0	1.9	1.8
31	.22		0	0		0		2.2		2.0	1.9	
TOTAL	9.00	1.28	0	0	.70	0	66.54	100.2	61.4	58.6	59.0	57.4
MEAN	.29	.043	0	0	.025	0	2.22	3.23	2.05	1.89	1.90	1.91
AC-FT	18	2.5	0	0	1.4	0	132	199	122	116	117	114
MAX	1.5	.22	0	0	.34	0	3.4	3.6	2.2	2.0	2.3	2.3
MIN	0	0	0	0	0	0	0	2.1	1.9	1.8	1.7	1.8
CAL YR	2006	TOTAL	364.79 MEAN		1.00 MAX	3.		0		724		
WTR YR	2007	TOTAL	414.12 MEAN		1.13 MAX	3.	6 MIN	0	AC-FT	821		

MAX DISCH: 5.42 CFS AT 17:30 ON Oct. 6, 2006 GH 1.24 FT. SHIFT -0.02 FT. MAX GH: 1.24 FT. AT 17:30 ON Oct. 6, 2006

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

# PIONEER DITCH AT THE COLORADO-NEW MEXICO STATELINE WY2007 HYDROGRAPH



## ENTERPRISE DITCH AT THE COLORADO-NEW MEXICO STATELINE

LOCATION.--Lat 37°00′50″, long 108°11′18″, in SW4SE14 sec. 3, T.32 N., R.13 W., NMPM, La Plata County.

DRAINAGE AREA. --N/A

CAL YR 2006

WTR YR 2007

TOTAL

TOTAL

GAGE.--Sutron Satlink 2 high data rate DCP with a shaft encoder in a 30-inch diameter corrugated metal pipe
 shelter and well at a 2-foot Parshall Flume. Primary reference gage is outside staff gage installed in
 flume. The DCP record is the primary and only record.

REMARKS.--Record is complete and reliable, except for the following periods: Nov. 18-30; Dec. 1-11, 2006, when ice formed in the stilling well. Record is good, except for the period when the stilling well iced up. Record during this period should be considered poor, although it was a period of zero flow in the winter. Station maintained and record developed by Brian Boughton.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

RATING TABLE. -- ENTDITCO01 USED FROM 01-OCT-2006 TO 30-SEP-2007

			DISCHARGE	E, IN CES		EAN VALUE		IO SEFIEM	DER 2007			
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	0	0	0	0	0	3.1	4.9	4.1	2.4	2.0	0
2	2.3	0	0	0	0	0	2.9	4.9	4.8	2.4	2.1	1.0
3	.93	0	0	0	0	0	2.8	4.7	4.8	2.3	2.2	1.3
4	.12	0	0	0	0	0	2.7	4.7	4.8	2.3	3.2	2.1
5	.55	0	0	0	0	0	2.5	3.7	3.6	2.3	2.9	2.4
6	3.1	0	0	0	0	0	2.8	3.8	3.2	2.2	2.4	2.3
7	4.6	0	0	0	0	.05	4.5	4.8	2.7	2.3	2.6	2.2
8	4.6	0	0	0	0	1.5	3.8	4.8	2.4	2.2	2.6	1.3
9	4.2	0	0	0	0	2.6	3.8	3.7	2.8	2.2	2.3	1.3
10	4.1	0	0	0	0	2.5	4.0	3.0	3.1	2.2	2.3	1.9
11	3.4	0	0	0	.37	2.4	3.2	4.2	3.1	2.2	2.3	2.3
12	2.8	0	0	0	1.8	2.4	3.7	5.0	2.8	2.2	2.3	2.1
13	2.4	0	0	0	1.5	2.4	4.4	5.1	2.3	2.2	2.3	2.2
14	3.2	0	0	0	1.3	2.8	4.2	5.0	2.3	2.2	2.2	1.9
15	4.3	0	0	0	.43	3.1	4.1	5.0	2.3	2.1	2.2	1.7
16	3.5	0	0	0	.27	3.1	4.2	4.9	2.3	.73	2.2	2.2
17	3.3	0	0	0	.25	3.4	4.2	5.0	2.3	0	2.2	2.4
18	3.9	0	0	0	.22	3.6	4.3	4.9	2.3	0	2.2	2.2
19	3.0	0	0	0	.37	3.5	4.3	4.8	2.3	0	2.1	1.8
20	2.5	0	0	0	.21	3.5	4.2	4.8	2.3	0	1.9	2.2
21	2.8	0	0	0	0	3.6	4.3	4.9	2.2	0	1.7	2.0
22	3.4	0	0	0	0	3.7	3.5	4.9	2.3	1.5	1.9	2.0
23	3.0	0	0	0	0	3.6	2.4	4.9	2.4	2.5	.66	2.4
24	2.4	0	0	0	0	3.4	2.5	4.8	2.4	2.4	0	3.7
25	1.3	0	0	0	0	3.2	2.4	4.7	2.3	2.4	0	2.6
26	1.3	0	0	0	0	2.9	2.3	4.7	2.4	2.4	0	2.2
27	.60	0	0	0	0	2.5	2.3	4.6	2.6	2.4	0	2.2
28	.36	0	0	0	0	2.4	2.4	4.7	2.5	2.8	0	2.1
29	.11	0	0	0		3.0	2.5	4.7	2.4	2.7	0	1.9
30	0	0	0	0		3.3	4.1	4.8	2.4	2.5	0	1.3
31	0		0	0		3.3		3.8		2.4	0	
TOTAL	74.67	0	0	0	6.72	71.75	102.4	143.2	84.5	58.43	50.76	59.2
MEAN	2.41	0	0	0	.24	2.31	3.41	4.62	2.82	1.88	1.64	1.97
AC-FT	148	0	0	0	13	142	203	284	168	116	101	117
MAX	4.6	0	0	0	1.8	3.7	4.5	5.1	4.8	2.8	3.2	3.7
MIN	0	0	0	0	0	0	2.3	3.0	2.2	0	0	0

MAX DISCH: 5.23 CFS AT 06:45 ON Apr. 8,2007 GH 0.77 FT. SHIFT -0.01 FT. MAX GH: 0.77 FT. (GH CORRECTION -0.01 FT APPLIED) AT 12:15 ON Oct. 7,2006

1.29 MAX

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.

471.66 MEAN

651.63 MEAN

5.0 MIN 5.1 MIN

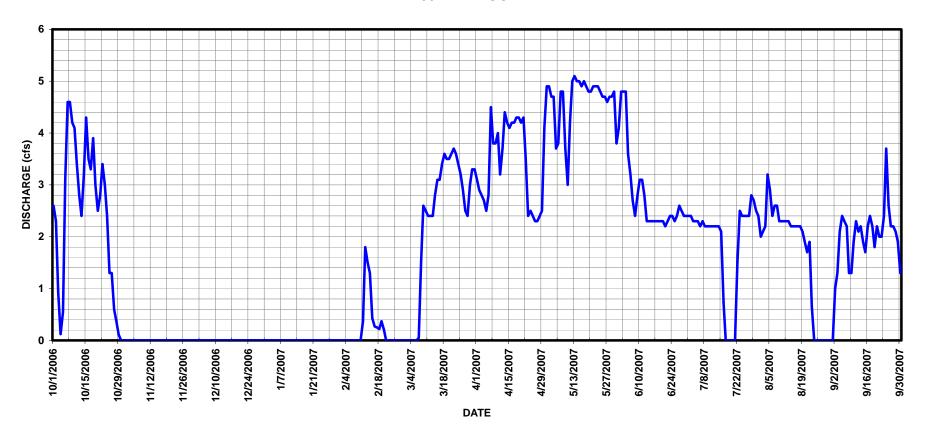
0 AC-FT

0 AC-FT

936

1290

# ENTERPRISE DITCH AT THE COLORADO-NEW MEXICO STATELINE WY2007 HYDROGRAPH



## 09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'59", long 108°11'17", in NW4SE4 sec. 10, T.32 N., R.13 W., NMPM, La Plata County, CO, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.5 mi downstream of Johnny Pond Arroyo, and 4.9 mi north of La Plata, NM.

DRAINAGE AREA AND PERIOD OF RECORD. -- 331 mi<sup>2</sup>. Jan. 1920 to current year. Monthly data only for some periods.

GAGE.--Stevens A-71 graphic water stage-recorder and Sutron Satlink 2 HDR DCP and shaft encoder on separate floats in a 42-inch diameter concrete well and a 64-inch by 64-inch cement block shelter. The floats are located inside of a 14-inch PVC oil cylinder. The primary reference gage is a drop tape in the gage used to reference the gage when the well is frozen around the oil cylinder and an electric drop tape for all other times. Also equipped with an air temperature sensor. The DCP record is the primary record. Datum of gage is 5,975.15 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record from the DCP is complete. Record is reliable, except for the following periods: Oct. 8, 2006, when the floats hung up in the well; Nov 30, Dec 1-10, 21-27, 2006, Jan 6-11, 15-31, Feb 1-6, and Mar 1-4, 2007, when ice on the control affected the stage-discharge relationship; and, Aug 31, Sep 1-2, 2007, when the intakes were plugged or closed. Record good, except for days on which ice affected the stage-discharge relationship and the intakes were closed or plugged. Record during this period should be considered poor. Record for the period when the floats were hung up should be considered fair. Station maintained and record developed by Brian Boughton.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

MAR

APR

MAY

59

1719

55.5

3410

106

30

1120

37.3

2220

78

1.0

566

18.9

1120

37

11

2.6

288.9

9.32

573

30

3.8

5.1e

281.9

9.40

559

39

2.0

507.8

16.4

1010

56

2.8

TUN

AUG

SEP

RATING TABLE.--LAPMEXCO32 USED FROM 01-OCT-2006 TO 30-SEP-2007

DEC

JAN

FEB

DAY

OCT

12

259.6

8.65

515

11

5.8

1199.9

38.7

2380

235

9.3

31

TOTAL

MEAN

AC-FT

MAX

MIN

VOV

				*								
1	12	11	7.6e	9.0	8.1e	11e	18	50	78	9.4	34	12e
2	9.6	11	7.7e	8.7	7.3e	10e	15	106	74	8.5	29	6.3e
3	9.3	10	7.8e	8.8	8.0e	8.8e	14	78	69	7.3	34	6.5
4	12	8.5	7.8e	8.9	8.7e	11e	13	54	73	7.4	50	11
5	18	7.5	8.0e	9.7	9.5e	12	13	56	72	8.2	38	10
6	32	7.0	8.1e	7.5e	11e	12	20	59	76	9.5	56	9.4
7	235	6.2	8.1e	8.1e	12	12	26	39	55	10	42	6.5
8	151e	6.2	8.2e	8.3e	12	17	32	31	50	7.8	27	5.9
9	93	6.2	8.2e	9.0e	12	22	37	30	36	6.3	24	6.0
10	88	5.8	8.3e	9.5e	13	19	28	33	34	3.9	22	5.3
11	48	5.9	8.4	9.7e	17	16	23	42	38	4.6	23	5.3
12	36	6.2	8.1	10	22	15	26	46	32	5.8	19	3.3
13	31	7.0	8.0	11	20	16	23	83	38	5.1	14	3.6
14	31	8.4	8.0	9.9	20	17	14	98	38	5.9	8.0	2.8
15	33	8.4	8.0	3.4e	15	16	11	63	36	5.0	6.3	2.0
16	30	8.0	7.5	5.8e	15	15	12	49	37	5.3	6.5	3.0
17	29	8.6	7.5	6.0e	15	17	12	105	36	5.3	6.9	5.3
18	30	9.8	7.5	6.4e	14	19	17	57	37	3.8	8.7	4.8
19	27	10	8.5	7.8e	17	18	16	39	31	4.9	6.6	2.3
20	25	10	8.3	8.0e	16	18	15	46	26	7.5	5.1	4.1
21	26	10	7.0e	7.7e	14	18	15	63	22	6.7	3.9	2.9
22	28	10	6.2e	7.7e	14	20	16	56	20	14	3.6	2.7
23	27	11	7.2e	8.0e	15	18	16	74	19	11	3.5	4.5
24	25	11	7.2e	8.5e	14	17	18	58	16	7.6	3.6	39
25	21	10	7.6e	8.8e	14	15	16	42	13	9.0	2.8	20
26	21	10	8.0e	8.6e	15	14	12	36	14	8.8	3.3	30
27	17	9.8	8.4e	8.5e	13	12	12	32	14	9.3	4.5	30
28	16	9.8	8.7	8.6e	13	12	15	40	14	22	7.8	22
29	14	9.7	9.1	8.8e		17	26	45	12	13	5.0	9.7
30	13	6.6e	8.8	8.8e		22	35	50	10	30	4.6	5.7

23

489.8

15.8

972

23

8.8

CAL YR 2006 TOTAL 6096.34 MEAN 16.7 MAX 235 MIN 0.21 AC-FT 12090 WTR YR 2007 TOTAL 7322.1 MEAN 20.1 MAX 235 MIN 2 AC-FT 14520

384.6

13.7

763

22

7.3

MAX DISCH: 373 CFS AT 16:45 ON Oct. 7, 2006 GH 5.73 FT. SHIFT 0.04 FT. MAX GH: 5.73 FT. AT 16:45 ON Oct. 7, 2006

8.6e

258.1

8.33

512

11

3.4

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD. e-Estimated

8.7

246.5

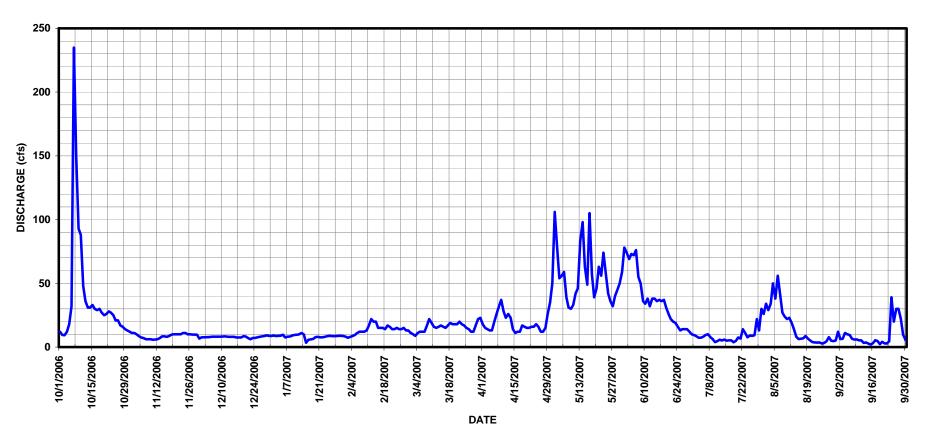
7.95

489

9.1

6.2

# 09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE WY2007 HYDROGRAPH



## 09370000 MANCOS RIVER NEAR MANCOS, CO

LOCATION. -- Lat 37°21'13", long 108°15'41", in NE4NE4 sec. 27, T.36 N., R.13 W., NMPM, Montezuma County.

DRAINAGE AREA. -- 72.6 mi<sup>2</sup>.

OCT

NOV

DAY

30

31

CAL YR 2006

TOTAL

MEAN

AC-FT

MAX

MIN

15

14

917

29.6

1820

176

14

10e

485 16.2

962

2.2

10

TOTAL.

7.5e

7.0e

292.8

9.45

581

13

7.0

6739.9 MEAN

GAGE.--Graphic water-stage recorder and a Sutron SatLink 2 HDR DCP and shaft encoder on separate floats in a 42" concrete well and 64"x64" cement block shelter. The primary reference gage is a steel drop tape referenced to an adjustable reference point on the instrument shelf. The DCP is the primary record. Datum of gauge is 7,190 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Record is complete. Record is reliable, except for the following periods: stage-discharge relationship affected by ice: Nov. 29-30, 2006, Dec. 1-4, 11-15, 20-26, 30, 31, 2006, Jan. 1-4, 6-10, 13-23, 2007, Feb. 1, 15-18, 21-25, 2007, March 1-7, 2007. Record fair, except for those periods of ice affected record, which are poor. Station maintained by Brian Boughton and record developed by Jason Morrow.

DISCHARGE, IN CFS, WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 MEAN VALUES

MAR

APR

MAY

JUN

JUL

AUG

SEP

30

944

31.5

1870

89

18

28

798

25.7

1580

51

16

RATING TABLE. -- MANMANCO09 USED FROM 01-OCT-2006 TO 30-SEP-2007

DEC

JAN

FEB

DIII	001	1101	DEC	01111	1 111	11111	711.11	11111	0011	001	1100	OLI
1	14	17	10e	7.0e	6.0e	8.5e	21	35	51	33	26	29
2	15	22	10e	6.5e	6.3	8.5e	20	101	64	32	23	29
3	16	22	10e	6.5e	6.1	9.0e	19	120	55	30	24	31
4	17	21	10e	6.5e	5.9	10e	21	96	54	29	26	33
5	29	19	13	6.9	6.5	12e	27	90	53	30	24	32
6	119	19	13	6.5e	7.2	13e	29	75	52	31	33	30
7	176	19	12	6.5e	7.8	15e	29	55	35	31	51	30
8	30	18	11	7.0e	7.8	24	28	50	29	30	48	29
9	28	18	11	7.0e	8.3	21	30	47	29	29	37	29
10	30	18	12	7.0e	8.5	20	27	42	33	29	29	28
11	25	16	11e	7.3	11	21	22	31	34	28	24	28
12	23	18	10e	7.3	13	26	21	34	28	30	22	28
13	24	15	10e	7.3e	12	33	20	78	25	29	21	26
14	24	17	10e	6.5e	8.9	38	17	158	29	28	18	23
15	30	16	9.5e	6.0e	8.5e	40	16	153	30	28	16	22
16	29	22	9.7	6.0e	8.7e	47	17	139	32	28	16	24
17	30	19	9.6	6.2e	8.7e	45	16	169	26	27	24	27
18	28	15	9.2	6.0e	8.8e	48	17	113	26	26	22	23
19	24	15	8.9	6.2e	9.0	47	17	85	22	26	21	18
20	21	15	8.5e	6.5e	8.9	44	16	77	19	25	20	18
21	20	14	8.5e	6.5e	8.8e	42	16	67	22	28	19	18
22	18	13	8.0e	6.5e	8.8e	38	15	86	27	41	19	18
23	18	13	7.5e	6.5e	8.7e	35	15	90	28	27	22	89
24	17	13	7.5e	6.8	8.5e	31	15	74	29	35	24	57
25	19	13	7.5e	6.8	8.7e	30	13	71	28	35	25	38
26	17	12	7.5e	6.8	9.7	31	10	56	24	31	25	48
27	16	12	7.8	6.7	9.5	31	11	48	22	31	29	40
28	16	12	7.8	6.6	8.9	32	17	47	27	29	28	36
29	15	12e	7.8	6.6		30	26	53	31	36	27	33

26

26

882.0

28.5

1750

48

8.5

29

597

19.9

1180

176 MIN

30

10

49

49

2438

78.6

4840

169

31

33

997

33.2

1980

3.0 AC-FT

64

19

39

32

943

30.4

1870

41

2.5

13370

19320

WTR YR 2007 TOTAL 9739 MEAN 26.7 MAX 176 MIN 5.9 AC-FT
MAX DISCH: 624 CFS AT 22:15 ON Oct. 6, 2006 GH 4.94 FT. SHIFT 0.03 FT.
MAX GH: 4.94 FT. AT 22:15 ON Oct. 6, 2006

239.5

8.55

475

1.3

5.9

18.5 MAX

6.4

6.8

205.7

6.64

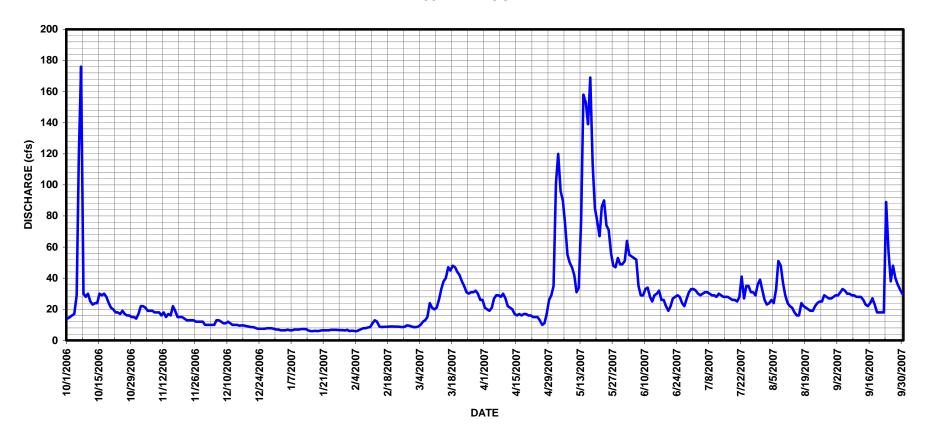
408

7.3

6.0

FOR MORE COMPLETE OR DETAILED INFORMATION SEE DAILY OR MONTHLY RECORD.  $\ensuremath{\mathsf{e}}\xspace-\mathsf{Estimated}$ 

## 09370000 MANCOS RIVER NEAR MANCOS CO WY2007 HYDROGRAPH



# Index

A
A.P. GUMLICK TUNNEL RELEASE TO CLEAR CREEK NEAR JONES PASS
ABC LATERAL NEAR MONTROSE
ALAMOSA CREEK BELOW TERRACE RESERVOIR
ALAMOSA RIVER ABOVE WIGHTMAN FORK NEAR JASPER, CO
ALAMOSA RIVER below RANGER CREEK, CO
ALVA B. ADAMS TUNNEL AT EAST PORTAL
ARKANSAS RIVER ABOVE PUEBLO
ARKANSAS RIVER AT CANON CITY
ARKANSAS RIVER AT CATLIN DAM, NEAR FOWLER
ARKANSAS RIVER AT CATLIN DAM, NEAR FOWLER, CO (COMBINED)
ARKANSAS RIVER AT LA JUNTA
ARKANSAS RIVER AT NEPESTA ROAD BRIDGE NEAR NEPESTA, CO
ARKANSAS RIVER AT PORTLAND
ARKANSAS RIVER AT SALIDA
ARKANSAS RIVER NEAR NOCKY FORD, CO
ARKANSAS RIVER NEAR WELLSVILLE
AURORA HOMESTAKE PIPELINE ABOVE ELEVENMILE RESERVOIR
В
BEAR CREEK AT MORRISON
BEAR CREEK AT MOUTH, AT SHERIDAN
BIG SPRING CREEK at MEDANO RANCH
BIG THOMPSON RIVER AT MOUTH NEAR LA SALLE
BIG THOMPSON RIVER AT MOUTH OF CANYON, NEAR DRAKE77
BIG THOMPSON RIVER (above Lake Estes) AT ESTES PARK
BIG THOMPSON RIVER(below Lake Estes) NEAR ESTES PARK
BLUE RIVER AT HIGHWAY 9 BRIDGE BELOW BRECKENRIDGE
BOB CREEK DITCH NEAR GLENDEVEY, CO
BOREAS PASS DITCH AT BOREAS PASS
BOULDER CREEK AT BOULDER
BOULDER CREEK NEAR ORODELL
BOUSTEAD TUNNEL AT EAST PORTAL NEAR LEADVILLE
BUCKHORN CREEK NEAR MASONVILLE
3USK-IVANHOE TUNNEL AT EAST PORTAL NEAR MALTA
C
CACHE LA POUDRE RIVER AT GREELEY WASTEWATER PLANT NEAR GREELEY99
CACHE LA POUDRE RIVER AT MOUTH OF CANYON, NEAR FORT COLLINS
CACHE LA POUDRE RIVER NEAR GREELEY
CAMERON PASS DITCH AT CAMERON PASS
CATLIN CANAL, NEAR FOWLER
CHALK CREEK AT NATHROP
CHAPMAN GULCH NEAR NAST, CO
CHARLES HANSEN FEEDER CANAL BELOW BIG THOMPSON SIPHON NEAR DRAKE
CHARLES HANSEN FEEDER CANAL POWER PLANT TO BIG THOMPSON RIVER
CHERRY CREEK AT THE MOUTH NEAR RED MESA
CLEAR CREEK ABOVE CLEAR CREEK RESERVOIR
CLEAR CREEK AT DERBY
CLEAR CREEK BELOW CLEAR CREEK RESERVOIR, NEAR GRANITE, CO
COAL CREEK NEAR PLAINVIEW
COLUMBINE DITCH NEAR FREEMONT PASS
CONEJOS RIVER BELOW PLATORO RESERVOIR
CONEJOS RIVER NEAR LASAUSES, CO (COMBINED)
CONEJOS RIVER NEAR LASAUSES, MAIN (NORTH) CHANNEL, CO
CONEJOS RIVER NEAR MOGOTE
COTTON CREEK near MINERAL HOT SPRINGS
COTTONWOOD CREEK AT BUENA VISTA

CROOKED ARROYO NEAR SWINK
D
DEADMAN CREEK near CRESTONE
E
EAST PORTAL HOOSIER PASS TUNNEL NEAR ALMA
F
FALL RIVER AT THE MOUTH NEAR IDAHO SPRINGS, CO
G
GARNER CREEK near VILLA GROVE
н
HAROLD D. ROBERTS TUNNEL NEAR GRANT
I
ILLINOIS RIVER NEAR RAND
K
KERBER CREEK NEAR VILLA GROVE, CO
L
LA GARITA CREEK NEAR LA GARITA  LA JARA CREEK AT GALLEGOS RANCH, NEAR CAPULIN  LA PLATA AND CHERRY CREEK DITCH NEAR HESPERUS, CO  LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE  LA PLATA RIVER AT HESPERUS  LAKE CREEK ABOVE TWIN LAKES RESERVOIR  LAKE CREEK BELOW TWIN LAKES  LAKE FORK CREEK BELOW SUGAR LOAF DAM NEAR LEADVILLE  LARAMIE-POUDRE TUNNEL NEAR CHAMBERS LAKE  327  469  473  LAKE PLATA RIVER AT HESPERUS  161  LAKE CREEK BELOW TWIN LAKES  163  LAKE FORK CREEK BELOW SUGAR LOAF DAM NEAR LEADVILLE  159  LARAMIE-POUDRE TUNNEL NEAR CHAMBERS LAKE

LARKSPUR DITCH NEAR MARSHALL PASS
М
MAJOR CREEK near VILLA GROVE
N
NAVAJO RIVER AT BANDED PEAK RANCH, NEAR CHROMO
0
OLYMPUS TUNNEL (ESTES FOOTHILLS CANAL) AT LAKE ESTES
P
PINE RIDGE DITCH NEAR HESPERUS, CO PINE RIVER WEMINUCHE PASS DITCH AT WEMINUCHE PASS 379 PINOS CREEK NEAR DEL NORTE PIONEER DITCH AT COLORADO-NEBRASKA STATE LINE PIONEER DITCH AT HEADGATE NEAR LAIRD 157 PIONEER DITCH AT THE COLORADO-NEW MEXICO STATELINE POT CREEK AT UTAH-COLORADO STATELINE NEAR VERNAL, UT POT CREEK AT UTAH-COLORADO STATELINE NEAR VERNAL, UT PURGATOIRE RIVER AT NINEMILE DAM, NEAR HIGBEE PURGATOIRE RIVER AT NINEMILE DAM, NEAR HIGBEE, CO (COMBINED) PURGATOIRE RIVER BELOW HIGHLAND DAM NEAR LAS ANIMAS, CO 231 PURGATORIE RIVER BELOW HIGHLAND DAM NEAR LAS ANIMAS, CO 227 PURGATORIE RIVER AT TRINIDAD, CO 219
R
RATON CREEK ABOVE STARKVILLE, CO.  REDLANDS CANAL NEAR GRAND JUNCTION

5
SAGUACHE CREEK NEAR SAGUACHE  SAN ANTONIO RIVER AT MOUTH, NEAR MANASSA  353  SAN ANTONIO RIVER AT MOUTH, NEAR MANASSA  354  SAN ANTONIO RIVER AT MOUTH, NEAR MANASSA  357  SAN ANTONIO RIVER AT MOUTH, NEAR MANASSA  358  SAN ANTONIO RIVER AT MOUTH, NEAR MANASSA  359  SAN SANEL CREEK Near CRESTONE  359  SKYLINE DITCH NEAR CHAMBERS LAKE  145  SANKE RIVER AT KEYSTONE SKI AKEA  401  SOUTH BOULDER CREEK BELOW GROSS RESERVOIR NEAR COAL CREEK  51  SOUTH BOULDER CREEK BELOW GROSS RESERVOIR NEAR COAL CREEK  520  SOUTH CHAMBEL DIVERSION NEAR ELDORADO SPRINGS  53  SOUTH CHAMBEL NORTON DRAIN DITCH NEAR LA SAUSES  SOUTH FORK FRYINGFAN RIVER AT UPPER STATION NEAR NORRIE, CO  SOUTH FORK FRYINGFAN RIVER AT UPPER STATION NEAR NORRIE, CO  SOUTH FORK FRYINGFAN RIVER AT UPPER STATION NEAR NORRIE, CO  SOUTH PLATTE RIVER ABOVE ELEVENHILE CREVOR RESERVOIR  SOUTH PLATTE RIVER ABOVE SPINNEY MOUNTAIN RESERVOIR, NEAR HARTS  SOUTH PLATTE RIVER ABOVE SPINNEY MOUNTAIN RESERVOIR, 13  SOUTH PLATTE RIVER AT DENVER  SOUTH PLATTE RIVER AT DENVER  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 1  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2  SOUTH PLATTE RIVER AT JULESBURG, CO. CHANNEL NO 2  SOUTH PLATTE RIVER BELOW CHEERING NEAR MARD  SOUTH PLATTE RIVER BELOW CHEERI
_
T
TABOR DITCH AT SPRING CREEK PASS  TARBELL DITCH NEAR COCHETOPA PASS  TARRYALL CREEK AT BORDEN DITCH NEAR JEFFERSON  TARRYALL CREEK BELOW TARRYALL RESERVOIR  TREASURE PASS DITCH AT WOLF CREEK PASS  TRINCHERA CREEK ABOVE MOUNTAIN HOME RESERVOIR  TRINCHERA CREEK ABOVE TURNERS RANCH, NEAR FORT GARLAND  TRINCHERA CREEK BELOW SMITH RESERVOIR, NEAR BLANCA  TWIN LAKES TUNNEL AT EAST PORTAL NEAR TWIN LAKES  251, 252
υ
UNCOMPAHGRE RIVER NEAR OLATHE
v
VIDLER TUNNEL NEAR ARGENTINE PASS
W
<u> </u>
WALTON CREEK NEAR STEAMBOAT SPRINGS, CO. 429 WEMINUCHE PASS DITCH AT WEMINUCHE PASS. 381 WEST DIVIDE CREEK NEAR RAVEN. 425 WIGHTMAN FORK AT MOUTH NEAR JASPER, CO. 319 WIGHTMAN FORK BELOW CROPSY CREEK, NEAR SUMMITVILLE, CO. 317 WILD CHERRY CREEK near CRESTONE. 287

WILLIAMS CREEK-SQUAW PASS DITCH AT SQUAW PASS WILLIAMS FORK AT MOUTH NEAR HAMILTON, CO WILLOW CREEK near CRESTONE WILSON SUPPLY DITCH NEAR EATON RESERVOIR WIND RIVER BY-PASS NEAR ESTES PARK, CO. WIND RIVER NEAR ESTES PARK WURTZ DITCH EXTENSION NEAR LEADVILLE WURTZ DITCH NEAR TENNESSEE PASS	437 299 153 . 63 . 61 243
Y	
YAMPA RIVER ABOVE LAKE CATAMOUNT	427

## Station Identification Codes

## DIV I

	DIV I
	NAME
ADATUNCO	ALVA B. ADAMS TUNNEL AT EAST PORTAL, NEAR ESTES PARK
ADANETCO	ALVA B. ADAMS TUNNEL AT EAST PORTAL (NET), NEAR ESTES PARK BEAR CREEK AT MORRISON
BCRMORCO	BEAR CREEK AT MURKISUN
DCKSRECO	BEAR CREEK AT SHERIDAN BERTHOUD PASS DITCH AT BERTHOUD PASS
BFCLYOCO	BOULDER CREEK FEEDER CANAL NEAR LYONS BIG THOMPSON AT MOUTH, NEAR LA SALLE
	BOB CREEK DITCH NEAR GLENDEVEY
BOBGLNCO BOCBGRCO	
BOCELSCO	SOUTH BOULDER CREEK BELOW GROSS RESERVOIR SOUTH BOULDER CREEK NEAR ELDORADO SPRINGS
	MIDDLE BOULDER CREEK AT NEDERLAND
	BOULDER CREEK AT BOULDER
BOCOROCO	BOULDER CREEK NEAR ORODELL
	BOREAS PASS DITCH AT BOREAS PASS
BOSDELCO	SOUTH BOULDER CREEK, DIVERSION NR ELDORADO SPRINGS
	BIG THOMPSON RIVER ABOVE LAKE ESTES
	BIG THOMPSON RIVER BELOW LAKE ESTES
BTPPMCCO	BIG THOMPSON RIVER AT MOUTH OF CANYON, NEAR DRAKE CHARLES HANSEN FEEDER CANAL POWER PLANT TO BIG THOMPSON
	BUCKHORN CREEK NEAR MASONVILLE
BTNFDRCO	NORTH FORK BIG THOMPSON RIVER AT DRAKE
CAPDCPCO	CAMERON PASS DITCH NEAR CAMERON PASS
CLAFTCCO	CACHE LA POUDRE AT CANYON MOUTH, NEAR FORT COLLINS
CLAGRECO	CACHE LA POUDRE AT CANYON MOUTH, NEAR FORT COLLINS CACHE LA POUDRE NEAR GREELEY
CLEDERCO	CLEAR CREEK AT DERBY COAL CREEK NEAR PLAINVIEW
DEADDPCO DILTUNCO	DEADMAN DITCH NEAR DEADMAN PARK DILLE TUNNEL NEAR DRAKE
	FALL RIVER AT MOUTH NEAR IDAHO SPRINGS
FISHESCO	FISH CREEK NEAR ESTES PARK
GRNDRDCO	GRAND RIVER DITCH AT LA POUDRE PASS
HECHBSCO	CHARLES HANSEN FEEDER CANAL BELOW BIG THOMPSON SIPHON CHARLES HANSEN FEEDER CANAL WASTEWAY TO BIG THOMPSON
	AURORA HOMESTAKE PIPELINE
	HOOSIER PASS TUNNEL AT MONTGOMERY RES., NEAR ALMA LARAMIE POUDRE TUNNEL
	LEFTHAND DIVERSION S. ST. VRAIN CREEK NEAR WARD
LTCANYCO	LITTLE THOMPSON RIVER AT CANYON MOUTH, NEAR BERTHOUD
	MICHIGAN DITCH AT CAMERON PASS
	MIDDLE ST. VRAIN CREEK NR. PEACEFUL VALLEY
MOFTUNCO	MOFFAT WATER TUNNEL, GILPIN COUNTY
	OLYMPUS TUNNEL (ESTES FOOTHILLS CANAL) AT LAKE ESTES
ONEJURCO	SOUTH PLATTE RIVER AT JULESBURG CHANNEL #1
PIOHDGCO	PIONEER DITCH AT HEADGATE
PTOSTLCO	PIONEER DITCH AT CO/NE STATE LINE
PLAANTCO	SOUTH PLATTE RIVER BELOW ANTERO RESERVOIR SOUTH PLATTE RIVER AT COOPER BRIDGE, NEAR BALZAC SOUTH PLATTE RIVER BELOW CHATFIELD RESERVOIR
PLABALCO	SOUTH PLATTE RIVER AT COOPER BRIDGE, NEAR BALZAC
PLACHACO	SOUTH PLATTE RIVER BELOW CHATFIELD RESERVOIR
	SOUTH PLATTE RIVER BL. CHEESMAN RESERVOIR
PLADENCO	SOUTH PLATTE RIVER AT DENVER
PLAGEOCO	SOUTH PLATTE RIVER NEAR LAKE GEORGE
PLAGRACO PLAHARCO	NORTH FORK SOUTH PLATTE RIVER AT GRANT SOUTH PLATTE RIVER ABOVE ELEVENMILE RESERVOIR
PLAHENCO	SOUTH PLATTE RIVER AT HENDERSON
PLAJUCCO	SOUTH PLATTE RIVER AT JULESBURG COMBINED
PLAJULCO	SOUTH PLATTE RIVER AT JULESBURG LEFT CHAN. #4
PLAJURCO	SOUTH PLATTE RIVER AT JULESBURG RIGHT CHAN. #2
PLAKERCO	SOUTH PLATTE RIVER NEAR KERSEY
PLASPICO	SOUTH PLATTE RIVER ABOVE SPINNEY RESERVOIR
PLASPLCO	SOUTH PLATTE RIVER AT SOUTH PLATTE
PLASTRCO	SOUTH PLATTE RIVER BELOW STRONTIA SPRINGS
PLAWATCO	SOUTH PLATTE RIVER AT WATERTON
PLAWELCO	SOUTH PLATTE RIVER NEAR WELDONA
ROBTUNCO	ROBERTS TUNNEL AT EAST PORTAL NEAR GRANT
SKYDCLCO	SKYLINE DITCH AT CHAMBERS LAKE
SSVWARCO	SOUTH ST. VRAIN NEAR WARD
STCTUNCO	STRAIGHT CREEK TUNNEL AT EISENHOWER TUNNEL
STLINECO	STATELINE DITCH RETURN NEAR JULESBURG
SVCLYOCO	SAINT VRAIN CREEK AT LYONS
SVCPLACO	ST. VRAIN CREEK AT MOUTH, NEAR PLATTEVILLE
SVSLYOCO	ST. VRAIN SUPPLY CANAL NEAR LYONS
TARBORCO	TARRYALL CREEK AT BORDEN DITCH NEAR JEFFERSON
TARTARCO	TARRYALL CREEK BELOW TARRYALL RESERVOIR

VIDTUNCO	VIDLER TUNNEL NEAR ARGENTINE PASS
WINDESCO	WIND RIVER NEAR ESTES PARK
WINBYPCO	WIND RIVER BY-PASS NEAR ESTES PARK
WSDEARCO	WILSON SUPPLY DITCH NEAR EATON RESERVOIR

## DIV II

CODE	NAME
ARKCACCO	ARKANSAS RIVER AND CATLIN CANAL COMBINED
ARKCANCO	ARKANSAS RIVER AT CANYON CITY
ARKCARCO	ARKANSAS RIVER BELOW X-Y DITCH DAM NEAR CARLTON
ARKCATCO	ARKANSAS RIVER BELOW CATLIN DAM NEAR FOWLER
ARKGRNCO	ARKANSAS RIVER AT GRANITE
ARKLAJCO	ARKANSAS RIVER AT LA JUNTA
ARKNEPCO	ARKANSAS RIVER NEAR NEPESTA
ARKNECCO	ARKANSAS RIVER AT NEPESTA ROAD BRIDGE COMBINED
ARKPORCO	ARKANSAS RIVER AT PORTLAND
ARKPUECO	ARKANSAS RIVER ABOVE PUEBLO
ARKROCCO	ARKANSAS RIVER AT ROCKY FORD
ARKSALCO	ARKANSAS RIVER AT SALIDA
ARKWELCO	ARKANSAS RIVER NEAR WELLSVILLE
BOUTUNCO	CHARLES H. BOUSTEAD TUNNEL
BUSTUNCO	BUSK-IVANHOE TUNNEL
CATCANCO	CATLIN CANAL AT CATLIN DAM, NEAR FOWLER
CANSWKCO	CROOKED ARROYO NEAR SWINK
CCACCRCO	CLEAR CREEK ABOVE CLEAR CREEK RESERVOIR
CCBCCRCO	CLEAR CREEK BELOW CLEAR CREEK RESERVOIR
CHCRNACO	CHALK CREEK AT NATHROP
COLDITCO	COLUMBINE DITCH
COCRBVCO	COTTONWOOD CREEK NEAR BUENA VISTA
CRBRLVCO	CUCHARAS RIVER AT BOYD RANCH NEAR LA VETA
CRHBLVCO	CUCHARAS RIVER AT HARRISON BRIDGE NEAR LA VETA
EWIDITCO	EWING DITCH
GRAWESCO	GRAPE CREEK NEAR WESTCLIFFE
HILCANCO	HIGHLAND CANAL BELOW HIGHLAND DAM NEAR LAS ANIMAS
HOMTUNCO	HOMESTAKE TUNNEL
HRC194CO	HORSE CREEK AT HIGHWAY 194
HURREDCO	HUERFANO RIVER NEAR REDWING
LAKATLCO	LAKE CREEK ABOVE TWIN LAKES RESERVOIR
LAKBTLCO	LAKE CREEK BELOW TWIN LAKES RESERVOIR
LARDITCO	LARKSPUR DITCH AT MARSHALL PASS
LFCBSLCO	LAKE FORK CREEK BELOW SUGAR LOAF DAM NR. LEADVILLE
MUDTOOCO	MUDDY CREEK NEAR TOONERVILLE
NMCHIGCO	NINEMILE CANAL AT NINEMILE DAM NEAR HIGBEE
OXFDITCO	OXFORD FARMERS DITCH NEAR NEPESTA
PURHILCO	PURGATOIRE RIVER BELOW HIGHLAND DAM NEAR LAS ANIMAS
PURHICCO	PURGATOIRE RIVER BELOW HIGHLAND DAM NEAR LAS ANIMAS (COMBINED)
PURNICCO	PURGATOIRE R AT NINEMILE DAM, NR HIGBEE COMBINED
PURNINCO	PURGATOIRE RIVER AT NINEMILE DAM, NEAR HIGBEE
PURTRICO	PURGATOIRE RIVER AT TRINIDAD
RACRSTCO	RATON CREEK ABOVE STARKVILLE
RULTOOCO	RULE CREEK NEAR TOONERVILLE
TWITUNCO	TWIN LAKES TUNNEL
WURDITCO	WURTZ DITCH NEAR TENNESSEE PASS
WUREXTCO	WURTZ EXTENSION DITCH NEAR TENNESSEE PASS

## DIV III

CODE	NAME
ALABELCO	ALAMOSA CREEK BELOW TERRACE RESERVOIR
ALARANCO	ALAMOSA RIVER BELOW RANGER CREEK
ALATERCO	ALAMOSA CREEK ABOVE TERRACE RESERVOIR
ALAWIGCO	ALAMOSA RIVER ABOVE WIGHTMAN FORK NEAR JASPER
BIGSPGCO	BIG SPRING CREEK AT MEDANO RANCH NEAR MOSCA
CARLAGCO	CARNERO CREEK NEAR LA GARITA
CBPALACO	CLOSED BASIN PROJECT CANAL NEAR ALAMOSA
CHECRECO	CHERRY CREEK NEAR CRESTONE
COCRMICO	COTTON CREEK NEAR MINERAL HOT SPRINGS
COCRESCO	COTTONWOOD CREEK NEAR CRESTONE
CONLASCO	COMBINED CONEJOS RIVER (NORLASCO SOULASCO)
CONMOGCO	CONEJOS RIVER NEAR MOGOTE
CONPLACO	CONEJOS RIVER BELOW PLATORO RESERVOIR
CULSANCO	CULEBRA CREEK AT SAN LUIS
DEDCRECO	DEADMAN CREEK NEAR CRESTONE

DLFDT0C0	DON LA FONT DITCH, COMBINED, AT PIEDRA PASS
DLFDT1CO	DON LA FONT DITCH NO. 1 AT PIEDRA PASS
DLFDT2CO	DON LA FONT DITCH NO. 2 AT PIEDRA PASS
GARVILCO	GARNER CREEK NEAR VILLA GROVE
GOOWAGCO	GOOSE CREEK AT WAGONWHEEL GAP
KERVILCO	KERBER CREEK NEAR VILLA GROVE
LAGLAGCO	LA GARITA CREEK NEAR LA GARITA
LAJCAPCO	LAJARA CREEK AT GALLEGOS RANCH NEAR CAPULIN
LITSPGCO	LITTLE SPRING CREEK AT MEDANO RANCH NEAR MOSCA
LOSORTCO	LOS PINOS RIVER NEAR ORTIZ
MAJVILCO	MAJOR CREEK NEAR VILLA GROVE
NCLCONCO	NORTH CLEAR CREEK BELOW CONTINENTAL RESERVOIR
NOCRESCO	CRESTONE CREEK, NORTH NEAR CRESTONE
NORDLSCO	NORTON DRAIN NEAR LA SAUSES
NORDSCCO	SOUTH CHANNEL NORTON DRAIN DITCH NEAR LA SAUSES
NORLASCO	NORTH CHANNEL CONEJOS RIVER NEAR LASAUSES
PINDELCO	PINOS CREEK NEAR DEL NORTE
PRWDITCO	PINE RIVER WEMINUCHE PASS DITCH AT WEMINUCHE PASS
RIOALACO	RIO GRANDE RIVER AT ALAMOSA
RIODELCO	RIO GRANDE NEAR DEL NORTE
RIOLINCO	RIO GRANDE AT RIO GRANDE-ALAMOSA COUNTY LINE
RIOLOBCO	RIO GRANDE NEAR LOBATOS
RIOMILCO	RIO GRANDE AT THIRTY MILE BRIDGE
RIOMONCO	RIO GRANDE AT MONTE VISTA
RIOWAGCO	RIO GRANDE RIVER AT WAGONWHEEL GAP
RIOSFKCO	SOUTH FORK RIO GRANDE RIVER AT SOUTH FORK
RITCRECO	RITO ALTO CREEK NEAR CRESTONE
RIOTRICO	RIO GRANDE RIVER ABOVE THE MOUTH OF TRINCHERA CREEK
SAGSAGCO	SAGUACHE CREEK NEAR SAGUACHE
SANCRECO	SAN ISABEL CREEK NEAR CRESTONE
SANFTGCO	SANGRE DE CRISTO CREEK NEAR FT. GARLAND
SANMANCO	SAN ANTONIO RIVER NEAR MANASSA
SANORTCO	SAN ANTONIO RIVER AT ORTIZ
SOUCRECO	SOUTH CRESTONE CREEK NEAR CRESTONE
SOULASCO	SOUTH CHANNEL CONEJOS RIVER NEAR LASAUSES
SPACRECO	SPANISH CREEK NEAR CRESTONE
TABDITCO	TABOR DITCH AT SPRING CREEK PASS
TARBELCO	TARBELL DITCH NEAR COCHETOPA PASS
TREDITCO	TREASURE PASS DITCH AT WOLF CREEK PASS
TRIMTNCO	TRINCHERA CREEK ABOVE MOUNTAIN HOME RESERVOIR
TRISMICO	TRINCHERA CREEK BELOW SMITH RESERVOIR
TRITURCO	TRINCHERA CREEK AB. TURNER'S RANCH
UTEFTGCO	UTE CREEK NEAR FORT GARLAND
WCSDITCO	WILLIAM'S CREEK-SQUAW PASS DITCH AT SQUAW PASS
WEMDITCO	WEMINUCHE PASS DITCH AT WEMINUCHE PASS
WFKMOUCO	WIGHTMAN FORK AT MOUTH AT ALAMOSA RIVER
WILCRECO	WILLOW CREEK NEAR CRESTONE

## DIV IV

CODE	NAME
ABCLATCO GUNREDCO MUDAPRCO MUDBPRCO RLCGRJCO SOUCANCO UNCOLACO	ABC LATERAL GUNNISON RIVER BELOW REDLANDS DIVERSION DAM MUDDY CREEK ABOVE PAONIA RESERVOIR MUDDY CREEK BELOW PAONIA RESERVOIR REDLANDS CANAL NR GRAND JUNCTION SOUTH CANAL NR MONTROSE UNCOMPAHGRE RIVER NEAR OLATHE

## DIV V

CODE	NAME
BLUNINCO	BLUE RIVER AT HIGHWAY 9 BRIDGE
CHAGULCO	CHAPMAN GULCH NEAR NAST
CRYDOWCO	CRYSTAL RIVER AT DOW FISH HATCHERY NEAR CARBONDALE
FRYIVLCO	FRYINGPAN RIVER NEAR IVANHOE LAKE
FRYMERCO	FRYINGPAN RIVER AT MEREDITH
FRYNFNCO	NORTH FORK FRYINGPAN RIVER NEAR NORRIE
FRYSFUCO	SOUTH FORK FRYINGPAN RIVER AT UPPER STATION
FRYTHOCO	FRYINGPAN RIVER NEAR THOMASVILLE
IVCRNACO	IVANHOE CREEK NEAR NAST
ROABMCCO	ROARING FORK RIVER BELOW MAROON CREEK NEAR ASPEN
ROAFRYCO	ROARING FORK RIVER ABOVE MOUTH OF FRYINGPAN RIVER NEAR BASALT
RFCMERCO	ROCKY FORK CREEK NEAR MEREDITH

SNAKEYCO	SNAKE	E RIVER	AT I	KEY	STONE	C
WSDRAVCO	WEST	DIVIDE	CREI	ΞK	NEAR	RAVEN

DIV VI

CODE	NAME
ILLRANCO	ILLINOIS RIVER NEAR RAND
MICMERCO	MICHIGAN RIVER NEAR MEADOW CREEK RESERVOIR
MICWLDCO	MICHIGAN RIVER NEAR WALDEN
PTCKSLCO	POT CREEK AT UTAH-COLORADO STATELINE NEAR VERNAL
WLTNCKCO	WALTON CREEK NEAR STEAMBOAT SPRINGS
WMFKHMCO	WILLIAMS FORK AT MOUTH NEAR HAMILTON
YAMABVCO	YAMPA RIVER ABOVE LAKE CATAMOUNT

## DIV VII

CODE	NAME
ANIHOWCO BLADIVCO CHEREDCO DOLBMCCO DOLTUNCO ENTDITCO FLOALECO FLOBLECO LAPHESCO LAPMEXCO	ANIMAS RIVER NEAR HOWARDSVILLE BLANCO DIVERSION NEAR PAGOSA SPRINGS CHERRY CREEK AT THE MOUTH NEAR RED MESA DOLORES RIVER BELOW MCPHEE RESERVOIR DOLORES TUNNEL OUTLET NEAR DOLORES ENTERPRISE DITCH AT THE COLO-NEW MEXICO STATELINE FLORIDA RIVER ABOVE LEMON RESERVOIR NEAR DURANGO FLORIDA RIVER BELOW LEMON RESERVOIR LA PLATA RIVER AT HESPERUS LA PLATA RIVER AT THE COLORADO/NEW MEXICO LINE
LITOSOCO LONREDCO LOSODVCO LPCDITCO MANMANCO MVIDIVCO NAVBANCO NAVOSOCO OSODIVDO PINDITCO PIODITCO RIOBLACO RIOMOUCO	LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM NEAR CHROMO LONG HOLLOW AT THE MOUTH NEAR RED MESA LITTLE OSO DIVERSION NEAR CHROMO LA PLATA AND CHERRY CREEK DITCH NEAR HESPERUS MANCOS RIVER NEAR MANCOS LONE PINE CANAL BELOW GREAT CUT DIKE NEAR DOLORES NAVAJO RIVER AT BANDED PEAKS RANCH NEAR CHROMO NAVAJO RIVER BELOW OSO DIVERSION DAM NEAR CHROMO OSO DIVERSION NEAR CHROMO PINE RIDGE DITCH NEAR HESPERUS PIONEER DITCH AT THE COLORADO-NEW MEXICO STATELINE RIO BLANCO BELOW BLANCO DIVERSION DAM NEAR PAGOSA RIO BLANCO AT THE MOUTH NEAR TRUJILLO